Vol. IV.

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1902.

No. 389.

TOLEDO SCALE COMPANY, PETITIONER,

vs.

THE COMPUTING SCALE COMPANY.

No. 388.

FIDELITY AND DEPOSIT COMPANY OF MARYLAND AND UNITED STATES FIDELITY AND GUARANTY COMPANY, PETITIONERS,

vs.

THE COMPUTING SCALE COMPANY AND TOLEDO SCALE COMPANY.

IN WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

PETITIONS FOR CERTIORARI FILED MAY 16, 1902.

WRITS OF CERTIORARI AND RETURN FILED OCTOBER 6, 1902.

(24,844)

(24,845)

(28,846)

(28,928)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1922.

No. 339.

TOLEDO SCALE COMPANY, PETITIONER,

vs.

THE COMPUTING SCALE COMPANY.

No. 388.

FIDELITY AND DEPOSIT COMPANY OF MARYLAND AND UNITED STATES FIDELITY AND GUARANTY COMPANY, PETITIONERS,

vs.

THE COMPUTING SCALE COMPANY AND TOLEDO SCALE COMPANY.

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

VOLUME IV.

INDEX.

	Original.	Print.
Invoices of scales sold to Fred Wolferman and Co..	630	2015
Defendant's Exhibit 24—Ledger account showing sale to A. F. Barnes.....	734	2066
Defendant's Exhibit 25—Ledger account showing sale to Philip Bartas.....	737	2068
Testimony of James Hall (recalled).....	744	2074
William E. Seatree (recalled).....	747	2076
William A. Zolg (recalled).....	753	2080
Plaintiff's Exhibit 53—Pink sheet relating to sale to G. Bariteau.....	770	2095
	Original.	Print.
54—Pink sheet relating to sale to Adelard Barill.....	772	2096

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., DECEMBER 15, 1922

	Original.	Print.
Plaintiff's Exhibit 55—Pink sheet relating to sale to S. Bardwell	774	2099
Testimony of Arthur M. Hansen	776	2101
Testimony of Orwell C. Reeves	801	2121
Exhibit 28—Cost sheets of 413 scale	811	2130
29—Cost sheets of 453 scale	815	2137
30—Cost sheets of 403, 404, and 405 scales.	820	2146
31—Cost sheets of 620, 621, and 622 scales.	825	2153
32—Cost sheets of 423 scale	831	2160
33—Cost sheets of 503, 504, and 505 scales.	837	2169
34—Cost sheets of 603, 604, and 605 scales.	842	2177
Testimony of William A. Zolg (recalled)	844	2181
Testimony of Henry Theobald	848	2183
Exhibit 35—Memorandum agreement between the De Vilbiss Computing Scale Co. and Henry Theobald *et al.*, July 1, 1901	848	2184
Testimony of George R. Frye	853	2188
Testimony of Henry Theobald (recalled)	854	2189
Exhibit 36—Assignment from De Vilbiss Computing Scale Co. to Toledo Scale & Cash Register Co., July 15, 1901	855	2189
Plaintiff's motion to strike certain exhibits and testimony	904	2229
Testimony of Orwell C. Reeves (recalled)	909	2234
William E. Seatree (recalled)	953	2270
Orwell C. Reeves (recalled)	999	2307
William L. Faherty	1003	2310
George H. Mould	1016	2322
William A. Zolg (recalled)	1017	2322
Whitten M. Randolph (recalled)	1017	2323
George F. Kellerman	1023	2328
George R. Frye (recalled)	1026	2330
Testimony of William E. Seatree (recalled)	1028	2332
Gorge R. Frye (recalled)	1081	2373
Halvor O. Hem	1133	2414
Charles C. Neale	1138	2418
Dr. Fritz Reichmann	1143	2422
Halvor O. Hem (recalled)	1244	2505
Charles A. Johnson	1268	2528
John L. Theobald	1277	2532
Plaintiff's objections to certain testimony	1297	2548
Testimony of Thomas Z. Phinney (recalled)	1298	2549
John H. Devlin	1350	2591
Charles H. Tierney	1367	2605
E. Willard Horton	1375	2612
Joseph McNally	1381	2617
Daniel C. Fallon	1390	2624
William H. Gillan	1396	2630
Thomas Z. Phinney	1408	2639
Notary's certificate	1418	2648
Testimony of Orwell C. Reeves (recalled)	1420	2649

"Q. What you did was to charge in the Charge Back Account the whole $150?

671 "A. Yes, sir.

"Q. On the books they would have been compelled to credit on that way of crediting the transaction the customer's account with $150, would they not?

"A. Yes, sir.

"Q. That would have left the company indebted to him $10?

"A. Yes.

"Q. The $10 would then, according to your style of keeping the books, be transferred to the Forfeited Account?

"A. Yes, sir.

"Q. And the $10 transferred to the Forfeited Account would be charged to the customer so as to balance his account?

"A. Well, the $10—Yes, in effect.

"Q. You could not leave the customer with $10 owing to him from the company, could you?

"A. No, quite so.

"Q. Now, do you undertake to say that as a legal proposition that is what took place, that that sale was reversed and that the $10 was paid back to the customer and then the customer paid it back to the company to be put into the Forfeited Account, you don't undertake to say that in legal effect was the transaction, do you?

"Mr. Meads: I object.

"The Master: Objection sustained.

"Mr. Zane:

"Q. According to your ideas, did any transaction of reversing a sale take place in 1911 at all?

"A. Yes, sir, on the books of the company it did.

"Q. On the books of the company they simply charged to the Charge Back Account the difference between the selling price of the scale and the forfeited installment, didn't they?

"A. What they did was simply to take the balance and apply it against forfeited installments.

"Q. Exactly, they put that in the Forfeited Installments Account, the balance, the difference between the selling price of the scale and the forfeited installment, didn't they?

"A. I don't understand the question.

"Q. Well, the company had no such account on its books as Forfeited Installments, did it?

"A. No.

"Q. All the entry of what you would say would be a Forfeited Installment Account was carried on the Charge Back Account by the company simply adding to the Charge Back Account the

672 difference between the selling price of the scale and the amount of the forfeited installment?

"A. I can't understand your question.

"Q. Well, we will have to reduce it to figures then and assume a sale has taken place in 1910 of a cylinder scale for the selling price of $150. The customer has paid $10 upon that scale. Then he does not carry out the contract and the scale is repossessed and the $10 is forfeited. Where does the company, according to its method of keeping its books, enter that transaction of repossession?

"A. The Company's method is to credit the customer with $140 and charge Charge Backs Account with $140.

"Q. Exactly. So they put $140 in the Charge Back Account and that $140 is the difference between the selling price of the scale and the forfeited installment, is it not?

"A. Yes.

"Q. That's the question you were asked before. Now, that figure, $7,603.54, on page 10 is an approximation, is it not?

"A. Yes, an average.

"Q. Well, it is an approximation?

"A. Yes, sir.

"Q. It does not attempt to state the exact amount of (commissions on) those forfeited installments for the whole year 1911, does it?

"A. No, it attempts to say that it is the average for the first three months of 1911 used for the entire year.

"Q. Yes. So then it is an approximation?

"A. Yes.

"Q. Therefore your total of $348,910.16 is an approximation, is it not?

"A. No, sir.

"Q. If you deduct an approximation from a fixed figure on the books, the result is an approximation, is it not?

"A. I would not say so.

"Q. Well, to have that figure, $348,910.16, which you make the total commissions, to be the exact total commissions, the deduction of $7,603.54 would have to be the exact amount of those commissions, would it not?

"A. Well, it is as exact as it is practicable to make it in the time we had because that figure of $7.6—

"The Master: Never mind. Just answer the question, Mr. Bowman, and we will save much time.

(Question read.)

673 "A. Yes.

"Q. Therefore your figure, $348,910.16, is an approximation, it's after an approximate item of $7,603.54 has been deducted?

"A. Yes, sir.

"Q. Therefore it becomes an approximation, does it not?

"A. To be technical, yes.

"Q. Well, to be actual, to be truthful, you have got to say that that is an approximation, your total figure of total commissions as adjusted is an approximation, is it not?

"A. Well, yes, it is an approximation as the result of that deduction.

"Q. Yes. Now, your next proposition is that you have divided that approximation as follows, "Chargeable as determined by detailed analysis of the respective items", to cylinder scales so much, to fan scales so much, to 2nd Hand scales so much, to unallocated items so much. How could you take an approximation and exactly allocate it between those different items?

"A. In the first instance the ledger account and the combination cash journal were analyzed and references were made to the vouchers and every item which could be traced to a voucher was allocated between cylinder and fan business which makes it a specific allocation between the cylinder and fan business. Thereafter the forfeited installments which had been picked up in the analysis of the Charge Back Account showed that a certain amount of commissions had been paid on those forfeited installments. The time consumed to go all the way through and arrive exactly at those commissions was not at our disposition, so we used three months as an average and that average was credited against those specific allocations of the commissions between cylinder and fan business.

"Q. Is your answer finished?

"A. Yes, sir.

"Q. You purport to say that by specific analysis you found the exact amount of the commissions chargeable to cylinder scales, to fan scales to 2nd Hand scales and unallocated items to be $348,910.16, don't you?

"A. Well, it would be more by that $7,603.54.

"Q. I am speaking of your account and referring to the bottom there where you divide by a certain amount a certain total of commissions between certain items. Now, what I asked you is
674 this: Does not your account state that you found these different amounts making up a total of $348,910.16 to be the amounts that you find on the books of total commissions paid on scales?

"A. I explained that in my previous answer.

"Q. Oh, answer the question.

"A. I don't get your question in this particular instance.

(Question read.)

"A. I can't understand your question.

"Q. Is $348,910.16 the amount which you find upon the books as being the total commissions paid on scales?

"A. No.

"Q. What is it?

"A. The Commission Account is that account which has charges for all the commissions credited to agents on scale sales.

"Q. Certainly. Now, you have found on the books as actual figure which is the first figure above here, at the top of the page?

"A. That's the balance of the Commission Account, yes.

"Q. Well, that is, according to the books, the total amount of commissions paid?

A. According to the Commission Account on the general ledger, that is the balance of the Commission Account.

"Q. Yes, and the general ledger purports to have carried into it all the transactions regarding commissions?

"A. All the charges for commissions, yes.

"Q. And that is the net result of the account in regard to commissions upon those books?

"A. Upon the general ledger, yes.

"Q. Now, you have already stated that you deducted an approximated amount from that and reached an approximate figure, $348,910.16. What I want you to answer is this: How in allocating exactly transactions as to commissions and different items of the commission account you can arrive at the exact figure which is, according to you, an approximation?

"A. Well, I explained that in my first answer when I told you that the commissions, regardless of this $7,603.54, were divided between cylinder and fan business specifically as they were found in the ledger account, the combination cash journal, and reference to the vouchers. Now then, after that specific allocation had been made between cylinder and fan business there was commissions on
675 forfeited installments which we could not in the time at our disposal actually ascertain, so we took the first three months of 1911 and used that as a basis. That was divided between the commissions on cylinder business and fan business and credited to those specifically allocated items, that is to say, those specifically allocated accounts of commissions on this new cylinder and new fan business.

"Q. Your figure, $138,229.85, purports to be an exact allocation, does it not?

"A. Yes, according to that.

"Q. Yes, an exact allocation. Your next figure, the amount to fan business, $130,680.38, purports to be an exact figure, does it not?

"A. Yes, sir.

"Q. Your next item, "to second hand scales $28,683.95" purports to be an exact figure does it not?

"A. Yes, sir.

"Q. Your next item, "to unallocated items $1,315.98", purports to be an exact figure, does it not?

"A. Yes, sir.

"Q. You have therefore four exact figures?

"A. Yes, sir.

"Q. You add those four exact figures together and they equal an approximation. How do you explain it?

"A. I told you subject to the $7,603.54.

"Q. Well then, those figures, those four figures there that purport to be exact, are exact if $7,603.54 is exact?

"A. Yes.

"Q. But $7,603.54 is not exact, therefore your four figures are not exact, is that it?

"A. $7,603.54——

"The Master: Just answer the question, don't argue.

"A. I am trying to tell him the $7,6——

"The Master: There can't be any question, there is not in my mind, what the situation is here, and if we can get this onto the record without stringing it out into so many pages, it will be much better for all of us.

"Mr. Zane:

"Q. Now, just answer the question.
"A. I have answered that question three times.

(Question read at direction of Mr. Zane.)

"A. Yes.
"Q. Well, will you produce your commission working papers and your summary?
"A. (Witness produces papers.)
676 "Q. Is the summary sheet you have shown me the sheet where you worked over those commissions and recast them?
"A. No, sir.
"Q. What is that sheet that represents your plastic work on the commissions?
"A. What do you mean by "plastic work", sir?
"Q. Recasting of the commissions.
"A. There is no sheet recasting the commissions.
"Q. Didn't you answer yesterday in regard to a certain sheet there that you had recast certain commissions as well as recast the allowances?
"A. I said that the allowances had been recast and the commissions as a result were also recast.
"Q. Well now, let us see that sheet?
"A. Yes, sir. Now, there are two of them. Which do you refer to, Toledo Scale allowances or——
"Q. Both, give us both.
"A. (Witness produces sheets.)
"Q. All your sheets that bear upon the question of recasting.
"A. (Witness produces another sheet.)
"Q. Before I go on with this commission I want to ask you one more question in regard to the Charge Back Account and your additions to the Charge Back Account. If a sale took place in 1910 and the repossession took place in 1911, in your account you did not reverse any transaction in regard to the number of scales that are put in your column of cylinder scale sales as having been sold during the year 1911, did you?
"A. No, sir.
"Q. Let me see your working sheets where you created the forfeited installments account.
"A. (Witness produces sheet.)
"Q. Does this also contain a summary of the working sheets or is there a summary that goes with that, another paper?

"A. I think there is a summary.

"Q. Let us see that.

"A. That was taken from Marwick, Mitchell's papers and there has been no revision. You see their sheets had the scale numbers. There is the quantity of scales and the figure has been used the same, you see. (Indicating.)

(Witness produces another sheet.)

"Q. In your summary which you have produced here you
677 show in the first column which is subdivided into fans and cylinders the exchange scale allowances as made by the company between fans and cylinders?

"A. Yes, sir.

"Q. In the next column you show the same allowance as divided by Price, Waterhouse & Company?

"A. Yes, sir.

"Q. In the next general column you have commissions divided between fans and cylinders according to the company, and then in the next two columns divided between fans and cylinders according to Price, Waterhouse & Company?

"A. Yes, sir.

"Q. Now, where did you get these figures for the company, these figures that you have divided between fans and cylinders per company?

"A. They were taken from the—(indicating). These figures that you see here come from the allowance analyses.

"Q. Yes.

"A. Where there are split sales. That is to say, where a cylinder and a fan scale, or one or more cylinder and fan scales were sold and one or more exchange scales were taken in part payment on each, an allowance was made.

"Q. And as to which you stated yesterday how you split certain items?

"A. Yes, sir.

"Q. Now, the reformation that you made in that exchange scale allowance you have already testified to?

"A. Yes, sir.

"Q. And the method upon which you made it you have already testified to?

"A. Yes, sir.

"Q. The way in which you got the commissions and the division between fans and cylinders according to the company was obtained from what source?

"A. That was obtained from either the vouchers or the accounts receivable ledgers as the case may have been.

"Q. Those commissions then you have reformed upon the principle you have already stated?

"A. Wherever there was an allowance for an exchange scale of a split sale of fan and cylinder scales the commissions were accordingly revised.

"Q. And those revised figures are carried into the totals as allocated at the bottom of page 10 of your Exhibit 22?

"A. Yes, sir.

678 "Q. Now, this detail sheet which you have here marked "15" at the top shows after a description of the scale and its price in one column the company's maximum allowance when sold singly?

"A. Yes.

"Q. Where did you obtain that information as to the company's maximum allowance when sold singly?

"A. From the catalogs and such notices as were furnished us by the management of the company.

"Q. You took that out of the catalogs then and you got other information from whom of the company?

"A. I think Mr. Zolg furnished—I took the matter up with Mr. Zolg. I don't know just where he got his information, but he furnished it.

"Q. Now, your next two columns apply to exchange allowances. We will pass over those, and your next is "Net Cost Value to Company," what does that mean, net cost value of what?

"A. I think that's used erroneously there.

"Q. Well, what does it mean?

"A. It means net cash value I think.

"Q. It is "N-e-t C-o-s-t Value to Company," is it not?

"A. It is net cash value to the company.

"Q. Do you mean to say that word is "cash?" (Indicating.)

"A. I took it for "cost" at first, but it is "cash."

"Mr. Zane: Will the Master look at that word that he swears is "cash."

"The Witness: Look at the rest of the sheet.

"Mr. Zane: Will your Honor tell me what you think it is.

"The Witness: If you put "cost" there he should have put "cash."

"Mr. Zane:

"Q. Do you say that's the same handwriting in that column? (Indicating.)

"A. I think it is.

"Q. Look again.

"A. Let's see. Let's look at the section.

(Sheet examined by counsel and the Master and the witness.)

"Mr. Meads: May I ask the witness a question at this point?

"The Master: Yes.

679 "Mr. Meads: The column marked "Net Cost Value to the Company" appearing on certain of the sheets before counsel for the complainant, what is meant?

"A. "Net Cash Value to Company."

"Mr. Meads: Are the words "Net Cash Value to Company" in the other columns on that same series, the captions to the corresponding columns on this particular sheet which is labeled "Net Cost Value to Company?"

"A. The preceding sheet is marked "Net Cash Value." From that preceding sheet should be taken the continuation through that section.

"Mr. Meads: And the proper caption to the column is "Net Cash Value to Company?"

"A. Net Cash Value to Company.

"Mr. Zane:

"Q. Now, what does that mean, "Net Cash Value to Company?"

"A. It means the net cash that the company will realize from that sale, of the combined fan and cylinder sale, after giving effect to the allowances at the catalog prices.

"Q. Now, your next column, or the next column here on this page is headed something that looks like "theatrical commissions" or "*thear tical* commissions," that's meant for "theoretical?"

"A. Yes, sir.

"Q. Who was this person that did this sheet, have you any idea?

"A. Yes, I think I have.

"Q. Who is he?

"A. A Mr. Weeks of our Detroit office.

"Q. Is he an accountant?

"A. He is a good accountant but a very poor penman.

"Q. Well, we will assume that this "theatrical commissions" is a piece of unconscious sarcasm on this part and means "theoretical commissions." What do you mean by "Theoretical commissions?"

"A. That theoretical commission means the commission that would have been paid on that division of the net cash value to the company at those per cents of commissions.

"Q. Well, what was your theory? You say it is the theoretical commission. What was the theory?

"A. The theory was this, that the company in calculating the commissions had applied those allowances as applying against the higher priced scales whereas we took the view that the allowance applied against the entire sale.

"Q. The entire scale or the entire sale?

680 "A. The entire sale, and the revision of those allowances was made and naturally the revision of the commissions would follow.

"Q. Well now, I asked you what your theory was. Just tell us in a few words what your theory was by which you put down figures in that "theatrical" or "theoretical" column?

"A. Well, as I have said, that theoretical commission is the commission that the company would have paid, would have credited to the agent if they had applied these allowances on the entire sale rather than on the higher priced scale.

"Q. That's what you mean by theoretical commission?

"A. Yes.

"Q. The commission which you think the company ought to have paid if it had followed a certain rule in regard to the values of the different scales entering into the sale?

"A. Yes, sir.

"Q. Now, which commissions have you allocated at the bottom of page 10, the theoretical or the actual commissions?

"A. In the commissions as shown by page 10 effect *has* given by this method in these accounts of combined sales of cylinder and fan scales where an allowance was made on a scale taken in.

"Q. Well, in other words you have incorporated in your totals there at the bottom of the page where you divide commissions among the different kinds of sales, in those totals you have incorporated your theoretical commissions, is that true?

"A. Yes, sir.

"Q. Now, you do not undertake to say that you have charged to cylinder scale business by detailed analysis all charges for commissions on the books of the company consisting of the combination journal and the ledger, do you?

"A. I don't just get that question.

"(Question read.)

"A. Yes, supplemented by the vouchers.

"Q. I thought you said you had reformed certain commissions on the books of the company to make them correspond to your theoretical basis.

"A. No, you misconstrue me. On the books of the company there is no commission account. There is one commission account which carries commissions for all classes of scale sales. That com-
681 mission account Marwick, Mitchell & Company took and divided between cylinder and fan business, in their case they charge 37.49 per cylinder scale. We divided by actual reference to the vouchers between cylinder, fan and 2nd Hand scale business. Among those vouchers are sales of combined scales, of one or more cylinder or fan scales where an allowance had been made. The company in that case adjusted the commission and calculated the allowance as having applied against the higher priced scale. In our initial allocation of these commissions between cylinder and fan business we followed their method and divided the commissions in the same manner. It then developed that these allowances which had been made on these sales were charged against the higher priced scale and in most instances the higher priced scale was a cylinder scale, and after a discussion with my superior the theory that it was inequitable to charge the higher priced scale with the entire allowance, that the allowance itself applied against the entire sale of cylinder and fan scales, the commissions which had been calculated by them on their previous basis of applying the allowance against the higher priced scale was necessarily revised and resulted in a slight increase in the commissions charged to the cylinder scale business.

"Q. Now, how did you do that? Didn't you reform certain commissions on the books of the company to make them correspond to your theoretical basis?

"A. No, we didn't reform them.

"Q. You changed them, didn't you?

"Mr. Meads: Changed the division, that's all.

"Mr. Zane:

"Q. No, you changed the amounts of the commissions charged to cylinder scales, didn't you?

"Mr. Meads: I object. The books don't show any commission specifically charged to cylinder scales as distinguished from fans.

"Mr. Zane: What I want to get at, if this witness will answer a question frankly, is when he changed the division of the commission as made on the books of the company between cylinders and fans, by their method of charging that he speaks of on the books of the company, he incorporated the commissions that had been changed as to division into his division at the bottom of page 10. Now, you can answer that yes or no.

"A. Yes.

"Q. Therefore the allocation made at the bottom of page
682 10 is not an allocation that corresponds to in all instances the method of the division of commissions between cylinders and fans as that method existed on the books of the company?

"A. No.

"Q. Now, did you get or inquire of Mr. Zolg whether he had allocated specific commissions to specific sales of cylinder scales during the year 1911?

"A. I don't recall that I did.

"Q. Did you ask him for any information upon that subject?

"A. I may have asked him for information from time to time, yes.

"Q. Did you ascertain from him that he had put a sworn account into this case on behalf of the Toledo Scale Company in which he allocated specific commissions to specific cylinder sales made in the year 1911, did you ascertain that?

"A. No, sir.

"Q. Now, in this Commission Account in the course of your investigation did you find that commissions were charged in 1911 upon sales made in 1912?

"A. I would have to refer to my working papers to see.

"Q. Have you any recollection of such a thing?

"A. There may have been some items.

"Q. Are you able to say whether you incorporated those—— Well, you took the total of the commissions as it was on the books?

"A. Yes, sir.

"Q. You didn't take anything out?

"A. Took the commission swhich had been charged to the account of Commissions for the year 1911.

"Q. Yes. So that if there were in that Commission Account commissions on sales made in 1912, you kept them in the account, didn't you?

"A. Yes, sir.

"Q. Now, what is your best recollection as to that matter, were there any commissions charged in 1911 upon sales that were made in 1912?

"A. It is my recollection there were overlaps at both ends of the period, both the beginning and the end of the year.

"Q. That is to say, that commissions were charged in 1911 on sales made in 1910?

"A. No. I didn't mean that exactly. I say that there
683 were commissions put through the books in 1910 on sales which were made in 1911.

"Q. How do you know that, did you investigate 1910, did you look at it?

"A. You will find by reference to the working papers——

"Mr. Zane: I object.

"The Master: It seems to me the witness can answer that question.

"(Question read.)

"A. I did not investigate 1910.

"Mr. Zane:

"Q. Well, did you look at any entry yourself?

"A. My recollection is that I did. If you will permit me to refer to the woking papers, I think I can show you some of the entries which I did refer to.

"Q. Now, you say you have personal knowledge that commissions were charged in 1910 on sales made in 1911?

"A. Let me put it this way. As an accounting proposition——

"Q. Is that what you say, yes or no?

"A. As an accounting problem, I am going to explain to you.

"Q. We don't care for that.

"The Master: Can't you answer that?

"A. There were commissions credited to agents in 1910 on sales which were not made or, that is to say, the shipments of the scales sold were not made until 1911, and by the same token there were commissions in 1911 on scales which were actually recorded in the books as sales in 1912. That is what I mean when I say there were overlaps at both ends of the periods.

"Q. Now, were there any occasions where commissions were charged in 1911 on sales that had been made in 1910?

"A. There were I think a few instances like that. If I am permitted to refer to the working papers, I can sey definitely.

"Q. Well, we don't want to take up time referring to your endless and voluminous papers.

"Now, did you yourself, or was there made under your direction an examination of the books of the Toledo Scale Company for the year 1912?

"A. No, sir.

"Q. Did you make or was there made under your direc-
684 tion any examination of the books of the Toledo Scale Company for the year 1910?

"A. No, sir.

"Q. Now, from your examination of the Commission Account and the vouchers you could have referred each commission to a particular sale at a particular time, couldn't you?

"A. Yes, sir.

"The Master: Do you mean sale or scale?

"Mr. Zane: Particular sale at a particular time.

"The Master: "Sale" might include more than one kind of scales.

"Mr. Zane: Yes, sir.

"Q. If you had so desired, you could have allocated to each one of the 4,632 cylsinder scales, sold according to your account in the year 1911, the specific commission that was paid on each lot of these 4,632 cylinder scales sold together, could you not?

"A. Yes, sir.

"Q. You didn't do that?

"A. We had not the time to do it, sir.

"Q. Now, you say in your account on page 1 of Exhibit 21 down towards the bottom of the page under the heading "Agents' and Managers' Commissions entered during the year, but exclusive of Commission on Forfeited Installments of Repossessed Scales. Proportion charged according to the amount actually credited on each transaction." Actually credited by whom.

"A. By the company and revised according to the theories of the exchange scale allowance transactions.

"Q. Yes, actually credited by Price, Waterhouse & Company on each transaction, that's what it ought to read, is it not?

"A. Well, yes, it would be true that way.

"Q. It would not be true if it read "Proportion charged according to the amount actually credited by the company on each transaction,' would it, that would not be true?

"A. Manifestly from the manner in which they kept the Commission Account.

"Q. It would not be true?

"A. No.

"Q. Now, your next matter in the account to which I desire to draw your attention is "All other commercial expenses, viz.,
685 administrative and general expenses." Give me the items that make up your administration and general expense.

"A. There was a statement here which had a list showing adjustments as well of that account and the debits, but I don't happen to have a copy now. It seems every one else has one.

"Q. Well, give me the different accounts that make up——

"A. That's what I am trying to do. All right.

"Q. Give me the items that make up administration in general.

"A.—

Cash discount	$16,001.98
Collection Expense	6,986.83
Fidelity Bonds	466.35
Prepaid Freight on Sales	12,991.19
Kitchen	967.13
Legal Expense	9,900.59
Litigation	1,681.86
Office Pay Rolls	75,915.22
Stationery and Office Supplies	8,290.92
Patent Expense	15,577.66
Postage	8,103.57
Quantity Discount	5,837.77
Recording Orders	1,973.73
Rent	1,700.00
Taxes	4,150.28
Telephone and telegraph	2,983.43
General Expense	3,198.30
District Managers' Salaries	42,400.37
H. T. Anderson Expense acct.	768.82
F. M. Harrington Expense Account	1,105.39
W. H. Roberts Expense Account	2,487.06
W. W. Graham Expense Account	1,131.42
L. L. Miller Expense account	1,776.33
F. L. Ditzler Expense account	794.00
J. . Theobold Expense account	450.82
T. H. Goodby Expense Account	16.30
O. C. Schupp Expense Account	970.29
District Managers' Convention expenses	252.25
Theodore Booth Expense Account	909.70
District Managers' Expense, F. A. Wallace	127.80
District Managers' Expense, C. J. Roberts	1,239.98
Special Salesmen's Salaries Credit	15.31

"Mr. Meads: That's an item in red.
"A. Yes, sir.

686	Special Salesmen's Expenses	$81.60
	New York Office	14,371.26
	Chicago Office	10,799.10
	Boston Office	8,474.69
	St. Louis Office	4,012.97
	Philadelphia Office	4,963.95
	Omaha Office	1,780.97
	Denver Office	553.85
	Kansas City Office	6,723.50
	New Orleans Office	2,693.02
	San Francisco Office	25,994.25

Those are all expense accounts—bracket them.

Traveling Expenses	$3,777.91
Toledo System	2,772.69

Hotel Expense	920.80
Visiting Salesmen's Expense	828.04
Prize contests	2,637.55
Miscellaneous selling expense	3,448.62
Advertising	35,349.47
Pittsburgh Office	4,857.89
Seattle Office Expense	2,368.14
Buffalo Office Expense	3,683.07
Indianapolis Office Expense	1,498.17
Minneapolis Office expense	4,219.88
Cleveland Office Expense	3,349.83
Dayton Office Expense	1,265.38
Cincinnati Office Expense	3,931.49
Milwaukee Office Expense	1,277.49
Miscellaneous Branch Offices	8,254.69
100% Club Convention Expense	8,324.51
That I think gives you	$406,626.99

"Q. Now, you have taken out of that certain items or you have added to that certain items taken out of the Toledo Scale Allowance Account, the Exchange Scale Allowance, Special Allowance Account, Commission Account and the Toledo Scale Allowance Account, have you not?

"A. Yes, sir.

"Q. And you have put those same items into the Collection Expense, the first two items, the next item you have put into Advertising, the next item you have put into Freight and the next item you have put into Losses on Bills Receivable?

"A. Yes, sir.

687 "Q. Of a total of $2,137.27?

"A. Yes, sir.

"Q. Which you have added to the $406,626.99?

"A. Yes, sir.

"Q. Now, these totals which you have given here just now do not, of course, contain any of those totals that go to make up that $2,137.27?

"A. No. sir.

"Q. Now, the amount received for repairs on customers' scales you have treated as a miscellaneous income and you have added it here?

"A. Yes. I should have given you another credit of that $1,712.88 which was included in there. You see this figure of $408,626.99 is the figure Marwick, Mitchell used.

"Q. Exactly. That's the figure on the book?

"A. No, it is not exactly the figure on the books. There is one item of $922.48 which is some adjustment that I have no particulars of.

"Q. Oh, turn over to page 11. In red there you have $922.48?

"A. Yes, sir.

"Q. You don't know what that is?

"A. No, sir.
"Q. You don't know what it was in Marwick, Mitchell's account of course?
"A. No, I have no particulars of it at all.
"Q. You never knew? Didn't you in going over the books find that this company had paid the income tax upon its profits?
"A. Well, the taxes were taken as they were paid, not as they were adjusted between periods.
"Q. Didn't you run across any income tax payment?
"A. Not charged to the profits of that year or the expenses of that year.
"Q. Didn't you in going through the books find an actual expenditure as the books of income taxes paid during the year 1911?
"A. There may have been such item charged to taxes, but I do not recall having seen it.
"Q. Now, you, of course, saw the Undivided Profits Account in 1911, didn't you?
"A. I think I did.
688 "Q. Well, didn't you see an item there that was charged to Undivided Profits, of the income tax?
"A. I do not recall.
"Q. You have the 1911 ledger before you. Please refer to that and see if you can find that. At the end of the year I think, is my recollection of it.
"A. I do not find any item. Here is an item 'Excise Tax,' 1910.
"Q. What is it?
"A. $930.07?
"Q. Well then, you see that that item of Excise Tax was not in the taxes, don't you?
"A. I see it now, I don't recall having seen it heretofore.
"Q. You didn't see that. Why, didn't you examine this ledger and these accounts for the year 1911?
"A. Yes, but this has nothing to do with 1911.
"Q. But you saw it was an expense paid during this year?
"A. It was marked 'Excise Tax 1910.'
"Q. Yes, but you know the taxes are levied in the one year, paid in the next, don't you?
"A. Quite so.
"Q. Yes. You say then that that was an expense item that had been paid in the year 1911, didn't you, because it was paid June 29, 1911?
"A. Yes, sir.
"Q. Well, what did you do with that item?
"A. Let it stand right where it is.
"Q. You didn't carry it into your accounts at all?
"A. No, sir.
"Q. Well, do you mean that that ought not to be a general expense?
"A. General expense, chargeable against 1910, yes.
"Q. Well, why didn't you look for the Excise Tax for 1911 paid in 1912?

"A. Well, I didn't, that was all.

"Q. Now, here you think that this expense because it applies to 1910 ought to apply against 1910 whereas a lot of items applying against 1910 you have no trouble in incorporating in the business of 1911, have you?

"A. I don't just get your meaning there.

"Q. All right. Now then, that item is $930.07 there. Did you investigate Marwick, Mitchell & Company's account carefully enough to ascertain that that $930.07 had $7.59 deducted from it on
689 account of a credit from San Francisco, credited to Undivided Profits from San Francisco, leaving $922.48?

"A. No, sir.

"Q. Well, if that is the item, it belongs in the General Commercial and Selling, does it not?

"A. Yes, and there could have been a great many other adjustments that could have been made as well. As I stated, this statement was taken and no adjustmetns made between periods and other expenses.

"M. Zane: I move to strike out all his answer after "yes."

"The Master: Motion sustained.

"Mr. Zane:

"Q. Now, in the items which you have given me for the General Commercial and Selling in order to make up the $406,626.99, is *is* there any other item that you want to add to those you have given? Do you want to add that item, $1,712.88, Amount received for Repairs made on Customers' Scales?

"A. That should be a deduction and an addition in the manner of stating this adjusted account here. You see when I gave you——

"Q. Just answer my question. The items which you have given of General Commercial and Selling, do you want to add anything else to make up the total of $406,626.99?

"A. For the purpose of the record, in that account or in that total $1,712.88 ought to be included both as an addition and a deduction.

"Q. Well, that would not change the amount at all, would it?

"A. I said as a matter of record.

"Q. Now those repairs on scales, $1,712.88, did you find a credit against that of $196.29?

"A. I do not know to what credit you refer.

"Q. Now, this figure of $1,712.88, Repairs on Scales, didn't you find that that had been taken into consideration in arriving at Marwick, Mitchell's figures of $406,626.99?

"A. Yes, sir, they had included it as a credit against Commercial and Selling Expenses.

"Q. Yes. So that if it is added it ought to be deducted, both added and deducted to make the figure $406,626.99?

"Mr. Meads: That's what the witness has said.

"Mr. Zane: I ask him if that's what he said.

"The Master: What's the answer, Mr. Bowman?

"A. To arrive at that figure you must treat it as a debit,
690 or rather as a credit, but when you are comparing it with the figure we arrived at in the $403,940.80 you must treat it as a reduction, that is to say, add it back again?

"Q. The first account that you give is an account of Cash Discounts $16,001.98 as a part of your items making up the total of Commercial and Selling Expense which you call Administration and General Expense. Is there such an account on the ledger, on the general ledger?

"A. There is.

"Q. I wish you would open to that account on the general ledger?

"A. (Witness opens ledger to account entitled "Cash Discount.")

"Q. Did you investigate that account on the general ledger entitled "Cash Discount," on page 151 of the general ledger?

"A. Yes, sir.

"Q. Now, the debits on that account consist of what?

"A. When I say investigated it, I did not examine into each debit that made up the account. I found out what the account itself purported to be.

"Q. Did you notice the annotations upon the side of the account, being figures and in some cases the letter "C" after a figure?

"A. Yes, sir.

"Q. Do you know what that meant wherever the letter "C" appeared?

"A. "C. D." is what appears.

"Q. Don't you see "3 C."?

"A. Yes, I do.

"Q. "3 C.", do you know what that referred to?

"A. No, sir.

"Q. Did you go through that account for the purpose of ascertaining whether there were any Canadian items in there?

"A. No, sir.

"Q. Did you make any attempt to separate out of that account any Canadian items?

"A. I didn't think there were any Canadian items in it.

"Q. Then you didn't make any attempt to separate any Canadian items from the account?

"A. The Canadian business is separate as I understand and therefore——

691 "Q. Oh, please answer my question directly. You made no attempt to separate Canadian items if there are any there?

"A. There were none in there.

"Q. Don't you know that the Canadian sales were billed from this Toledo office?

"A. Yes, sir.

"Q. Don't you know that the collections for the Canadian business took place from this office?

"A. I was not sure about that.

"Q. You knew that all the clerical work in regard to Canadian sales took place here, didn't you?

"A. I knew some of it did, I didn't know that all did.

"Q. You knew that the Canadian business had no bank account over in Canada, didn't you?

"A. No, I did not?

"Q. The next item you give is Collection Expense. What is the title of that account on the general ledger?

"A. Collection and Exchange.

"Q. Now, did you examine that account?

"A. No sir?

"Q. You did not?

"A. No, sir?

"Q. So you don't know whether there are any credit items in there or not?

"A. No, I assumed there were not. I took the figures of Marwick, Mitchell & Company, a copy of the trial balance which they used in the total of Commercial and Selling Expenses.

"Q. And of course you didn't make any attempt to separate Canadian items out of the account entitled Commercial and Selling, did you?

"A. I assumed there were no Canadian items in there.

"Q. You made no attempt to separate Canadian items, did you?

"A. I assumed there were no Canadian items in there.

"Q. Answer the question directly yes or no.

"A. No.

"Q. Now, in the account of Prepaid Freights, is there such an account as that on the general ledger?

"A. Yes, sir?

"Q. Did you examine that account to ascertain and separate Canadian items?

"A. I did not.

692 "Q. There is an account there, general expense, is there not?

"A. Yes.

"Q. Did you examine that account to find out whether there were any Canadian items on that account?

"A. No, sir.

"Q. Would your answer be the same as to the Litigation Account?

"A. Yes, sir.

"Q. Did you make an apportionment of the account. Office Pay Rolls, for business done for Canada?

"A. No, sir.

"Q. Why didn't you do that?

"A. Some discussion, some thought was given that particular item and it is my recollection that when it came up by such information as I could obtain it was relatively so small that it was not taken up, and, as I understand now, that there were some other items which the Canadian business did for this office that would more than offset, and in view of the circumstances——

"Q. What were those?

"A. It seems to me it has to do with selling or something of that sort. I won't say definitely what it was. I don't recall now ex-

actly what it was, but I believe it was argued the expense in that direction would be in favor of the Canadian office doing more to offset those pay rolls than it would amount to by dividing it here.

"Q. Don't you know in the year 1911 the total Canadian sales were $149,644.23?

"A. Yes, sir.

"Q. And did you think the clerical work and the Office Pay Roll Account that was concerned with doing that amount of business in the way of transacting all the business that was necessary at the general office amounted to nothing?

"A. Well, it amounted to a very small amount. I think the test applied was as to whether or not the Canadian business were absolutely eliminated, cast out entirely, what effect would it have on the clerical force of this office, and as I recall, that test when applied and that question when put to the management was that it would not influence at all, they would not be required to release any of their clerk hire.

"Q. That is the season then, because the office management stated that the same clerical force would be necessary whether they
693 did the Canadian business here in this office or not?

"A. Yes, sir.

"Q. That would not have applied, however, to separating out of the accounts specific items marked "Canadian," would it?

"A. No, I would think not.

"Q. Now, have you an account there on the general ledger of Undivided Profits? You have referred to it, have you not?

"A. Yes, sir.

"Q. Did you know that there were any Canadian items in Undivided Profits?

"A. I did not.

"Q. And hence you made no attempt to separate Canadian items out of Undivided Profits? Answer that yes or no.

"A. No, sir.

"Q. Now, in the account of Reserve for Losses on Bills Receivable did you know or ascertain from that account on the general ledger that there were any Canadian items in there?

"A. Losses on Bills Receivable were not considered in arriving at that figure. It was based on the sales.

"Q. Well, is there such an account on the general ledger "Reserve for Losses on Bills Receivable"?

"A. I think there is such an account. I will examine the ledger and see.

"Mr. Meads: Of course, the Master understand- that's not in one of these accounts he has testified to on this list. I suppose I can't object to the cross examination because he has a right to test the witness' knowledge, but it is not anything we were directly concerned in before the recess.

"A. There is such an account on the ledger entitled Reserve for Losses on Bills Receivable, of the general ledger.

"Q. So you don't know whether there are any Canadian items in that account or not, do you?
"A. No, sir.
"Q. And your answer would be the same as to the account, Reserve for Accounts Receivable, would it not?
"A. Yes, sir.
"Q. Was there an account of Interest on the general ledger?
"A. Yes, sir.
"Q. Interest Account?
694 "A. Yes, sir.
"Q. Do you know whether or not that account there was any item for Canadian business?
"A. I do not.
"Q. You didn't attempt to ascertain whether there was or not?
"A. No, sir.
"Q. Now, in the item of Legal Expense I have already asked you for that, whether or not you examined that for Canadian items. Is there an account on the general ledger "Quantity Discount"?
"A. Yes, sir, page 187 of the general ledger.
"Q. Did you examine that account to ascertain whether there were Canadian items in it?
"A. No, sir.
"Q. In looking over the account do you see any items marked with the letter "C" or with the figure "3" on the general ledger?
"A. Yes, sir.
"Q. And you don't know that that "3 C" means Canadian?
"A. No, sir.
"Q. Now, in the Account "Recording Orders," is there such an account on the general ledger?
"A. Yes, sir.
"Q. Do you find in that account any items marked "C"?
"A. Yes, sir.
"Q. Now, did you examine that account or investigate that account to find whether there were any Canadian items there?
"A. No, sir.
"Q. Is there such an account on the general ledger as Repairs on Scales, Repairing Account?
"A. Yes, sir.
"Q. What's the title of the account?
"A. Repairs on Scales, page 197 of the general ledger.
"Q. Do you see items in that account marked with the letter "C" and a figure?
"A. Yes, sir.
"Q. Did you attempt to ascertain whether there were any Canadian items in that account?
"A. No, sir.
"Q. Now, did you see the Canadian books, the books kept here?
695 "A. I think we did refer to them just by way of examination to get an idea of what they were.
"Q. If we took an item on this account, Repairs on Scales, an

item that is marked "3 C", for instance take the one July 31st, 3 C, $75.27. Do you know how to trace that back into this other book?

"A. No, sir.

"Q. You would not know where to go for 3 C, what book?

"A. No, sir.

"Q. Now, do you know whether there were any Canadian items in the Advertising Account?

"A. Yes, sir.

"Q. And you didn't investigate to find out?

"A. No, sir.

"Q. There is an account on the general ledger, Litigation, which is a different account from Legal Expense, is there not?

"A. There is, page 175 of the general ledger.

"Q. Now, did you make any investigation of that account to ascertain what portion of those items were chargeable against cylinder business?

"A. No, sir.

"Q. As a matter of fact, you took this account and apportioned it?

"A. Yes, sir.

"Q. And why did you apportion it on that basis between cylinders and fans?

"A. We took the total of Commercial and Selling——

"Q. Well, why? Why did you apportion it and not attempt to trace out what items were directly chargeable to cylinder business?

"A. It was one of the Commercial and Selling Expense items which was pro-*d*ated on a basis of gross sales.

"Q. Exactly. Now, did you pro-rate it. The question is why did you pro-rate. You did that because it was impossible to separate in your judgment between cylinders and fans the expenses that were in this general account?

"A. No, not exactly on that theory.

"Q. Could you have traced on the books and divided by allocation the charges that were to be made to cylinders and the charges that were to be made to fan scales?

"A. Perhaps you could on that one account?

"Q. Well, in all the accounts could you have done it?

696 "A. Oh no, not in all the accounts.

"Q. Well, therefore you pro-rated because you could not separate it on certain accounts?

"A. That is to say, taking the Commercial Expenses as a whole. You might have been able in some instances to have divided them between cylinders and fans.

"Q. Those were only a few instances?

"A. Yes, sir.

"Q. The great mass could not be divided that way?

"A. The great mass, yes.

"Q. For instance, Office Pay Roll, you could not have divided that at all?

"A. No, you could not.

"Q. Stationery and Office Expenses or Office Furniture—which was it?

"A. Office Supplies.

"Q. Office Supplies, you could not have divided that between cylinders and fans?

"A. No.

"Q. And on the Office Pay Roll Account you could not have divided the part attributable to the Canadian business, could you?

"A. Not very well, no.

"Q. You could not have divided on the matter of Stationery and Office Supplies the amount that was used for Canadian business, could you?

"A. Not if there was any use for the Canadian business.

"Q. And your answer would be the same as to the Postage Account, would it not?

"A. Yes, sir.

"Q. Now, the Postage Account, of course, could not be divided between cylinders and fans?

"A. Well, I presume any postage that was used where a fan scale say was involved and a cylinder scale sale was involved could have been kept track of, but as for dividing it as it stands on the books, I dobut if you could possibly do it.

"Q. It could not be done, could it?

"A. No.

"Q. Now, is there an account on the books "Patent Expense"?

"A. Yes, page 182 of the general ledger.

"Q. Did you attempt on that account to apportion it between cylinders and fans?

697 "A. No, sir.

"Q. Did you investigate that account of Patent Expense to ascertain what it was for?

"A. No, sir.

"Q. You didn't look at the vouchers at all?

"A. No, sir.

"Q. Now, suppose that you had looked at the vouchers and you had ascertained that a large part of that patent expense was expended by the Toledo Scale Company in defending this infringement action, would you have still charged a part of that patent expense as an expense against cylinders scales?

"A. Yes, sir.

"Q. Now, in investigating that Patent Expense Account if you had found that a part of that expense was for new patents, would you have still charged that part of it on the pro-rate basis to cylinder scales?

"A. As a strict accounting proposition I would not.

"Q. You would not?

"A. No, I think I would have separated that portion of the expense account and deferred it.

"Q. Deferred it to when?

"A. Well, to future operations.

"Q. Oh, you would have distributed it over the future operations?

"A. Yes, sir.

"Q. Now, in these different accounts you have given here there is one called the Toledo System. What did you ascertain that Toledo System to be?

"A. Some sort of an advertising scheme, I think. I won't be certain about it. It's my best recollection that's what it is.

"Q. Now, did you ascertain that that advertising scheme was used for the Canadian business as well as the U. S. Business?

"A. No, sir.

"Q. So you didn't attempt to apportion that account between Canadian and U. S. business in any way?

"A. No, sir.

"Q. Now, those Prize Contests, did you ascertain anything in regard to that?

"A. No, sir.

"Q. You didn't ascertain whether that was mixed up with Canadian business, did you?

698 "A. No, sir.

"Q. Did you ascertain this large item here in regard to the 100% Club was mixed up with Canadian business?

"A. No, sir.

"Q. Didn't you even investigate to find out who it was took the lead in that 100% Club?

"A. No, sir.

"Q. You didn't find that that was a Canadian agent then?

"A. No, sir.

"Q. Now, this large item of expense in 1911 of $25,994.35 for the San Francisco office was an account that had to do with the establishing of that office, didn't it?

"A. Well, it was an account, as I understand it, of expenses of the office.

"Q. The expenses of establishing the office, was it not, among other things?

"A. I don't know as to that.

"Q. You don't know?

"A. No.

"Q. Now, you say the times you have given here added up make $406,626.99?

"A. It should make that, yes, sir.

"Q. Well, have you got them anywhere added up on any of your papers?

"A. Yes, sir. (Producing papers.) Do you care to check them back with your figures? Here is the total here on the third sheet of this paper. (Indicating.)

"Q. According to your total here, they make $405,704.51, don't they?

"A. Yes, sir.

"Q. Then you add $922.48?

"A. Yes, sir.

"Q. That's an item in regard to excise taxes?

"A. That is the trial balance drawn from Marwick, Mitchell's papers.

"Q. Yes.

"A. That item of $922.48, I found nothing out about it and set it in there as the difference between Marwick, Mitchell's figures and the books.

"Q. When you add $922.48 you get $406,626.99?

"A. Yes, sir.

"Q. Now, you surely must have investigated that account on the books of Undivided Profits, didn't you?

"A. No, sir.

699 "Q. Well, didn't you look into that account to see whether or not certain allowances had been entered there improperly? You must have looked at it for that purpose.

"A. You must have confused Undivided Profits with Profits. Do you mean that account on the books, page 73, which is known as Undivided Profits which from the nature of the account represents the profits of all the year's business?

"Q. Oh, you don't put any confidence in what they called an account as to what they had in it. I am referred to the account that has got the item on June 29, Excise Tax, $930.07.

"A. Yes, sir.

"Q. Now, you would say unquestionably, would you not, that that item is improperly in the Undivided Profits, Excise Taxes?

"A. Well, if I were adjusting the accounts and making an examination for two or three years that item would be taken out and placed properly as an expense of 1910.

"Q. Oh well, irrespective of the year, you would not have Excise Taxes in Undivided Profits, would you?

"A. Well, it would not make any difference where they were.

"Q. Would you as a bookkeeper put it there?

"A. In this particular case it might be advisable to do it because the Undivided Profits represents an accumulation of profits for several years and this is an expense of the profits of 1910 and it properly would be chargeable against this.

"Q. Now, Excise Taxes you would classify under the head of a general and administrative expense, would you not?

"A. Yes, sir.

"Q. You would therefore put that amount in the proper year in your commercial overhead?

"A. Yes, sir.

"Q. Now, didn't you examine this Undivided Profits Account to see whether or not some other item had improperly gotten into this account, didn't you look at it for that purpose?

"A. In a cursory way, yes. There is nothing in the account except dividends and one or two small items except that Excise Tax of 1910.

"Q. Well, you did see dividends, didn't you?

"A. Yes.

"Q. That indicated profits to you, didn't it?

700 "A. They were paying dividends out of the profits of other years.

"Q. Do you mean to say that the directors of this company, some of them bankers in this town, were paying dividends in that way?

"Mr. Meads: Your Honor, I will have to object to that.
"Mr. Zane: I am assuming on cross-examination.
"Mr. Meads: I object to the question.
"The Master: Objection overruled.

"(Question read.)

"Mr. Meads: I object for another reason. It incorporates in his question matters not of the record at all. What evidence is there who the directors are at the present time?
"The Master: That's an immaterial part of the question. The answer just before is sufficient I think to predicate this question upon.
"Mr. Meads: Well, I object to the question as improper in form.
"The Master: Objection overruled.
"Mr. Zane: "Just answer.

"(Question read as follows: Do you mean to say that the directors of this company, some of them bankers in this town, were paying dividends in that way?)

"A. I have no reference to the directors. I simply take the account on the book, page 73, and interpret what it says there.
"Q. Now did you look at any books to see whether they paid an Excise Tax, which is the Income Tax, on any profits in the year 1911?
"A. I did not.
"Q. Well, you have already stated that you with Mr. Seatree consulted the testimony of Mr. Hall in this case, have you not?
"A. I didn't say I did if I recollect correctly.
"Q. Didn't you say that you had gone over the testimony of Mr. Hall in this case?
"A. I don't recall that I did. If I did, I must have been in error, because I don't think I did go over Mr. Hall's testimony. In fact, I am pretty sure I didn't.
"Q. Well, did Mr. Seatree say anything to you about an item, Excise Tax, of 1910, $930.07?
"A. No, he did not that I recall.
"Q. Well, you knew then or you do now when you see that item of Excise Taxes paid in 1910 that the company purported
701 to be paying taxes on profits for the year 1910, you know that when you look at the entry, don't you?
"A. Well, from this entry I should judge that the taxes on the profits of 1910 was this figure.
"Q. Yes. That would show you profits of $98,000, would it not?
"A. Well, I would have to see the copy of the tax return.
"Q. Oh, you know the rate, don't you?
"A. Well, I can't say, $98,000, I presume, whatever this rate would be.
"Q. Don't you know the rate for the income tax on corporations?

"A. Yes, Federal tax.
"Q. What is it?
"A. In this case one per cent over five thousand dollars.
"Q. That would make $98,000 for the amount they were paying taxes on?
"A. Yes.
"Q. $98,000 of profits in the year 1910?
"A. Yes, sir.
"Q. Can you tell us why you didn't look at the acounts in the year 1912 to find out whether any income tax was paid for the year 1911 or not?
"A. It probably never occurred to me.
"Q. It never occurred to you that this company that you were representing in your account as losing money was actually paying taxes on profits that it had made, that never occurred to you, did it?
"A. It didn't occur to me about the tax part of it.
"Q. Now, at the bottom of page 13 you divide the amount of $103,940.80 between cylinder, fan and 2nd hand business?
"A. Yes, sir.
"Q. And divide it on the basis of gross sales?
"A. Yes.
"Q. Why did you take gross sales as a basis?
"A. Well, the question of spreading the expenses——
"Q. Give us all your reasons for selecting gross sales.
"A. Well I can answer that by saying that I was instructed by Mr. Seatree to use that method?
"Q. You don't know why it was done?
"A. Why, yes.
"Q. Well then, tell us why, give us the reasons or as many of them as you know.
702 "A. It was discussed with reference to this particular item——
"Q. Discussed by whom?
"A. By Mr. Seatree and I. When I say that I was giving my views on it as a junior clerk.
"Q. All right. Now, did you concur in this method of division according to gross sales or did you differ from it?
"A. Well, I accepted the judgment of my superior officer in the matter.
"Q. Well, did your judgment concur in that?
"A. Ultimately it did, yes.
"Q. At first it did not? What do you mean?
"A. No, I had no judgment in the first instance.
"Q. Did you have any discussion with him that that had better be divided on the basis of net sales?
"A. No, I think not. At the time it was divided I remember looking over Marwick, Mitchell's papers and particularly their account and I saw it was divided on the basis of net sales, and in my own mind I argued if it were going to be divided on the basis of sales at all, it should be on the basis of gross sales since the expenditures for expenses could have been reasonably assumed to have oc-

curred in producing that volume of business; whether it ultimately panned out or not is a different question.

"Q. You have given one reason. Have you any other reason for dividing that General Commercial Expense on the basis of gross sales, is there any other reason or was there any other reason?

"A. Some consideration can be given to dividing it on the basis of units.

"Q. And what do you mean by that, units?

"A. By units of sales.

"Q. That is, scales?

"A. Scales, units of scales sold.

"Q. Yes, dividing it according to the number of scales sold?

"A. Yes, sir.

"Q. That would be a feasible method of division and in some ways might be very equitable in your judgment, might it not?

"A. Yes, sir.

"Q. Because it takes just as much trouble, writing and so on, to make a fan sale as it does a cylinder sale does it not?

"A. Yes, it does.

703 "Q. Well, what argued you out of that unit basis?

"Mr. Meads: I object. He has said he did this because his superior officers told him to.

"What difference does it make what his opinion was when in this particular regard he was merely following what Mr. Seatree told him to do?

"The Master: Objection overruled.

"A. Well, either way you would put that, that is to say, either on units or on a basis of gross sales there would be a chance for error, but I believe from the nature of these expense accounts and from the nature of the business that the error is less when the expenses are based on the basis of gross sales than it would be if you divided it on the basis of units.

"Mr. Zane:

"Q. Now, there is an error either way you mean to say?

"A. Yes, sir.

"Q. Now, why do you say the error is less when you divide it on gross sales than if you should divide it on units?

"A. Well, I think if you will look at these expense accounts, you will find the majority of them are, that is, the greater portion of the expenses are such expenses that you really could not divide on a unit basis, take for instance the office expenses at branches.

"Q. Well, why could not you divide that on the unit basis, office expenses at branches?

"A. And advertising and such other items.

"Q. Does not a fan scale take up as much room as a cylinder?

"A. Well, it is not a question of room. It is a question of marketing the article from the selling standpoint.

"Q. Oh, that's taken care of in commissions, but these general ex-

penses and this branch office expenses you talk about has to do with the expense at the branches, not with commissions.

"A. There are commercial and selling expenses.

"Q. Yes. Why would not the unit basis just as well apply, and apply with greater equitable force, to these expenses at a branch?

"A. When I started to speak you interrupted me. What I meant to say is that in my opinion so far as selling the scales are concerned it costs more to sell a higher priced scale than it does a lower priced scale.

704 "Q. The commission is greater, yes.

"A. I am not speaking of the commission. I am speaking of the commercial and selling expenses aside from the commissions.

"Q. Well, take this illustration of office expenses at some branch that you speak —. What do those office expenses at a branch consist of?

"A. I don't know as I know just exactly what they consisted of. I can imagine they consist of rent, light and heat and such other expenses.

"Q. Now, expenses of that character are more fairly apportioned with regard to the number of units of scales in the branches, are they not?

"A. Yes, in that particular case it may be, in some one case as in another, but I think if you take the selling expenses and commercial expenses as a whole you will find that it favors a division upon the basis of gross sales.

"Q. Well, you selected branch expense as one to which the gross sales basis of division was more applicable than the unit.

"A. Well, take advertising.

"Q. Now, you say that's an unfortunate illustration. You now take the item "Advertising." Let us see what that item amounts to, where is that item? Oh, yes, advertising. You assume that the higher priced scales are more advertised than the lower priced?

"A. Well, by reason of the higher value they can afford to spend more money in advertising.

"Q. On advertising?

"A. Yes.

"Q. That is an item that you would say would be more properly divided upon the gross sales basis?

"A. Yes, sir.

"Q. But you assume in that answer, do you not, that the cylinder scales would be more advertised than the fans, that's the reason for your answer, is it not, that assumption?

"A. No. In discussing this particular item I would say that the advertising would be more expensive for the cylinder than fan.

"Q. Well, in taking a page of advertising it would not cost any more whether it was devoted to cylinder advertising or fan advertising, would it?

"A. That's a detail I am not conversant with.

705 "Q. And generally speaking, in taking a page of advertising the company would advertise all its scales, would it not?

"A. Well, I don't know as to that.
"Q. You don't know?
"A. No.
"Q. Well, you selected advertising as one of your items that could be more properly divided upon the basis of gross sales than upon the basis of units and I am trying to get at all your reasons for saying that advertising could be more properly divided on that basis. Now, have you any other reasons than those you have given?
"A. Well, there is Office Pay Rolls for instance.
"Q. You now turn away from Advertising to Office Pay Rolls and you think Office Pay Rolls could be more propertly divided on the basis of gross sales than on the basis of units sold, do you think that?
"A. I think it is a more equitable distribution, yes.
"Q. On the basis of gross sales?
"A. Yes.
"Q. Have you not already answered me that it takes just as much office expense, just as much clerk hire, just as much stationery and writing in regard to a fan sale as it does in regard to a cylinder sale, you have already answered that, have you not?
"A. I am just discussing my reasons for these things now. As a matter of stating these accounts, understand Mr. Seatree is the one who authorized this division. You are asking me personally for my own opinion on it.
"Q. Yes?
"A. And I am trying to give you my personal views on it.
"Q. Yes.
"A. But as regards those personal views and these accounts here, Mr. Seatree tells me to pro-rate these expenses on a basis of gross sales and it is done.
"Q. I understand that, but we are getting at your reasons for concurring on this division, on the basis of gross sales.
"A. When you say "concurring", Mr. Zane, I don't just get your meaning there in the same sense I mean to answer your question.
"Q. I am using it in the sense you answer the question. You said "I ultimately concurred", what did you mean by "con-
706 curred"? Whatever you meant by "concurred" I mean by "concurred."
"A. Well then, I will give you my meaning of "concurred", that when this question of dividing the expenses of Commercial and Selling Expenses was reached Mr. Seatree authorized me to divide it on the basis of gross scale, make the calculations, which was done. That is my meaning of "concurring".
"Q. What did you mean by "I ultimately concurred"?
"A. Well, that was an expression. I might have left the word "ultimately" out and said "concurred".
"*Q.* Oh, yes, you might have anwsered it in a hundred different ways, but I want to know why you answered it in this way "I ultimately concurred", what did you mean by that?
"A. Well, that perhaps was a slip. I didn't mean anything by

"ultimately" except that when finally the accounts were cast that I did as I was told, to put it in plain, simple language.

"Q. That turns out to be a slip. The business from which the revenue was derived was the business of net sales, was it not?

"A. Oh, I think not. As an accounting theory I would say gross sales is what you derive your revenues, or rather, derive your profits from.

"Q. Well, your revenues dictate your profits. Now, your revenues are derived from your net business, are they not?

"A. No, sir, from your gross business.

"Q. Do you mean to say that if a scale is sold and repossessed you get any revenue beyond the amount forfeited for that repossessed scale?

"A. That's all you get. You may in some instances get the 2nd hand scale which is turned in as part payment on the new scale.

"Q. Suppose a scale is returned and the sale cancelled, do you get any revenue from that?

"A. No, sir.

"Q. Suppose a scale, as in many instances here, was never delivered at all, do you get any revenue from that?

"A. No, sir.

"Q. Well then, it is true, is it not, that your revenue comes, not from your gross sales, but from your net sales, is not that true?

707 "A. No, sir, it comes from your gross sales. You have to have a gross figure before you can get a net figure.

"Q. Now, turning to page 1 of Exhibit 21, do you see those notations there in red ink on page 1 of Exhibit 21; as you go down the page you have the percentage as to net sales, have you not, in each case?

"A. Yes, sir.

"Q. You were making some comparisons on the basis of net sales, were you not?

"A. In this case, yes.

"Q. There are three different cases of those percentages to net sales, that is, three different cases on that first page, are there not?

"A. Yes, sir.

"Q. If you turn over to page 2 your percentage is as to net sales, is it not?

"A. Yes, sir.

"Q. If you turn over to page 3 of this Exhibit 21, your percentages are as to net sales, are they not?

"A. Yes, sir.

"Q. If you turn over to page 4 of your Exhibit 21, the three percentages on that page are as to net sales, are they not?

"A. Yes, sir.

"Q. If you turn over to page 5, the last page of this exhibit, your percentage on that scale is a percentage to net sales, is it not?

"A. Yes, sir.

"Q. So that on every page of this exhibit you have the percentages made as to net sales, don't you?

"A. There are shown there calculations made as to comparisons for net sales, yes.

"Q. Now, didn't that establish net sales as a standard which you regarded as a correct standard?

"A. No, sir.

"Q. Now, take the item in your page 1 of Exhibit 21 which is just above Commercial Expenses, viz., Losses on Agents' and Customers' Accounts pro-rated on basis of gross sales. Have you your working sheet on that account, Losses on Agents' and customers' Accounts pro-rated on basis of gross sales?

"A. I think I have.

"Q. Have you got your working sheet on that item?

"A. Yes, sir.

708 "Q. Let me see it please.

"A. (Witnests produces sheet.) There is the item in question. (Indicating.)

"Q. Now, the difference between your Losses on Agents' and Customers' Accounts and the Marwick, Mitchell figure is that you take it on the gross sales and they take it on the net sales?

"A. Yes, sir.

"Q. Now, did it occur to you that by taking that percentage on gross sales you were compelling or causing a payment of three per cent losses on these items of cancelled sales of scales that were never delivered and of repossessed scales?

"A. Yes, sir.

"Q. What?

"A. Yes, sir.

"Q. And you would also have them paying three per cent on shortages, would you not?

"A. Yes, sir.

"Q. Well, how did you figure out that it would be a proper method of charging a percentage for losses to charge your percentage on a cancelled sale or a sale where delivery was never made or a repossessed scale or a shortage, how did you figure that out?

"A. I took the allowance for agents' losses on a basis of gross sales at the direction of Mr. Seatree and working under him to test out the accuracy or the correctness.

"Q. Well then, you had no independent judgment?

"A. I had no independent judgment.

"Q. As to the matter and you can offer us no reason at all on that subject?

"A. I don't think I ever discussed it further than to follow the instructions of Mr. Seatree who examined, if I remember correctly, the Agents' balances to get an idea of this loss reserve that was set up.

"Q. Now, as an expert accountant is it your judgment that three per cent ought to be allowed for losses on cancelled sales and sales where a scale was never delivered and on shortages?

"A. I don't know just as I understand your question.

(Question read.)

"A. If you are going to actually arrive at the losses, you would have to trace them right back to the sales. When you speak
709 of isolated cases like that, of course not, but as a general proposition I think gross sales is the safest method on which to predicate your reserve.

"Q. Why?

"A. Because in my estimation you are figuring—you are losing agents' accounts. These agents' accounts which you lose are the result of producing that volume of business.

"Q. Any other reason?

"A. Oh, I might assign other reasons, but I think that is the chief one.

"Q. Well, you might. Just see if you can.

"A. I would not attempt to.

"Q. Now, did you notice in this way of figuring the accounts that on those revised transactions of yours where you had put in the gross sales the whole billing value of repossessed scales, that you were causing three per cent to be paid on the gross sales on that amount which you had added to the gross sales by revising the transaction?

"A. I did not notice.

"Q. You didn't note that?

"A. No.

"Q. I next direct your attention to the item on page 1 of exhibit 21 entitled Manufacturing Cost and Commercial Expenses, and the next item below that is "Factory Cost respectively of "firm" New Scale Sales and of Repossessed Scales sold as 2nd Hand or Used, to-wit (1) Estimated cost of each scale sold furnished by the company, including factory overhead expenses $124,068.65", where did you get that figure, $124,068.65?

"A. From the working papers.

"Q. Of Marwick, Mitchell & Company?

"A. From our working papers.

"Q. Let us see your sheet of costs of cylinders now?

"A. This is the cost (producing sheet).

"Q. Oh, that's a typewritten thing. I want your working paper, if you have got one, where you assembled the costs of the different cylinder scales.

"A. I didn't assemble the cost of the different cylinder scales. The figure of $124,068.65 is taken from Marwick, Mitchell's cost sheets, or rather, from their report.

"Q. Taken from Marwick, Mitchell & Company's report?

"A. Yes, sir.

"Q. Now, where do you find that figure in their report? Now, have you got the working sheet?

710 "A. Yes, sir. (Producing papers.)

"Q. Just let me see what it is.

"A. It is called Cost of Sales. (Handing paper to Mr. Zane.)

"Q. Now, what was the figure referred to in Marwick, Mitchell & Company's report?

"A. Taking the figure which you see on this page——

"Q. What figure, name it?

"A. $74,151.95 which represents the labor and material cost of the net scales sold, 4675, and adjust it in respect of some 39 scales, if I remember correctly, that is the labor and material cost on them to $73,518.68, to that has been added the overhead expense to that manufacturing expense, on the basis of 68.758% to arrive at the $124,068.65.

"Q. Well, what you did then was you took the cost figure of labor and material?

"A. Yes.

"Q. In Marwick, Mitchell & Company's report which was the cost of labor and material for 4675 scales?

"A. Yes, sir.

"Q. And adjusted them on that basis per scale for 4632 scales?

"A. Yes.

"Q. Now, the difference between those numbers is 43 scales, not 39?

"A. Well, I said as near as I could recollect it was 39. 43 is correct.

"Q. The difference is 43 scales?

"A. Yes.

"Q. Now then, what was your unit cost per scale for those 43 scales that you subtracted?

"A. The same unit costs which are shown on Marwick, Mitchell & Company's report, Basis 1 for the year ending December 31, 1911.

"Q. But those units divided on cost?

"A. Well, wherever a unit, an increase of a unit or a decrease of a unit, the unit cost as shown on those columns was used.

"Q. Now, where is your sheet showing the type number of these 43 scales?

"A. (Producing paper.) It is a carbon or a copy. I don't know whether it is an exact carbon copy of Marwick, Mitchell & Company's report for the year ending December 31, 1911, which was furnished me.

711 "Q. Referring to the sheet that you have handed me, what is the meaning of those words written in red ink there above the red line?

"A. "2nd hand, rebuilt and our account."

"Q. That's that, 2nd hand, rebuilt?

"A. Yes, sir.

"Q. Does that mean that the scales below there are any of them 2nd hand, rebuilt?

"A. Well, Marwick, Mitchell & Company's statement or working papers show an analysis and a summary of the analysis of scales, units, that were taken from the New Scales Sales Account, and in there were these scales summarized and that was taken from what they called in their column 2nd hand and rebuilt.

"Q. It is consolidating the two. Now, you deducted for two No. 81 scales $29.72?

"A. Yes, sir.

"Q. You deducted for four No. 82 scales $59.44?
"A. Yes, sir.
"Q. You deducted for one No. 83 scale $14.86?
"A. Yes, sir.
"Q. You deducted for one No. 81 scale $14.86?
"A. Yes, sir.
"Q. You deducted for one No. 182 scale $14.86?
"A. Yes, sir.
"Q. You had next eight No. 345 scales to be deducted and one 345 to be added?
"A. Yes, sir.
"Q. And you therefore deducted seven No. 245 scales amounting to $103.25 at the cost of $14.75 per scale?
"A. Yes, sir.
"Q. You next deducted the price of twenty No. 346 scale at $14.86 per scale?
"A. The labor and material cost.
"Q. Amounting to a total of $297.20?
"A. Yes, sir.
"Q. And you next deducted the labor cost and material cost of three No. 347 scales at $14.86 per scale amounting in all to $44.58?
"A. Yes, sir.
"Q. You next deducted the labor cost and material of two No. 350 scales at $14.86 per scale amounting to $29.72?
"A. Yes.
"Q. You next deducted one No. 353 scale at $14.86?
"A. Yes.
712 "Q. You next deducted two No. 381 scales at $15.49 per scale amounting to $30.98?
"A. Yes, sir.
"Q. You next deducted two No. 387 scales at $17.37 per scale, being in all $34.74?
"A. Yes, sir.
"Q. You next deducted the cost of one No. 581 scale at $13.68 per scale?
"A. Yes, sir.
"Q. And your total deductions were $633.27?
"A. Yes, sir.
"Q. And that is the deduction which is the result of subtracting your one addition from the other deductions?
"A. Yes, sir.
"Q. You took that $633.27 and subtracted that from the $74,151.95 shown on Marwick, Mitchell & Company's report?
"A. Yes, sir.
"Q. And you got $73,518.68?
"A. Yes, sir.
"Q. Now, what did you add to that for factory overhead?
"A. 68.758%.
"Q. Of what?
"A. Of $73,518.68.

"Q. That being Marwick, Mitchell & Company's percentage figure?

"A. No, sir.

"Q. Oh, that being your 68——

"A. Yes, 68.758 which is on this cost of scales sheet.

"Q. Yes, your percentage figure was $68.758% and that percentage you took of what?

"A. Of the amount of $73,518.68 or $50,549.97.

"Q. That made your factory overhead?

"A. That is the factory overhead on the cylinder scales.

"Q. On those cylinder scales?

"A. On those cylinder scales, yes.

"Q. What did you means in your page here, 1, of Exhibit 21, by saying "Estimated costs of each scale sold furnished by the company" when as a matter of fact you took Marwick, Mitchell & Company's fiures and reduced them and used a different percentage on their figures? Those were not furnished by the company, were they?

"A. I assumed that Marwick, Mitchell & Company had obtained their figures from the company.

713 "Q. You knew from Marwick, Mitchell & Company's account where they obtained their figures, didn't you?

"A. They obtained them from the company I hope.

"Q. Well, you see below on this Marwick, Mitchell & Company account (reading) 'These costs are based on the nearest figures as shown in Zolg's testimony.' You say that on the Marwick Mitchell account?

"A. Yes, it is written right in that report.

"Q. Yes. Now, did you look at Zolg's testimony to see what the figures were?

"A. No, sir.

"Q. Well, didn't you have any curiosity to find out what was meant by basing costs upon Zolg's testimony, didn't you attempt to ascertain the basis of that statement?

A. It was plain right on the face of it, that's as far as I needed to go.

"Q. So that statement that you have there is not the estimated costs of scales sold furnished you or your Price, Waterhouse Company by the company, are they, those cost figures?

"A. Indirectly, yes, furnished us by the company.

"Q. Furnished you by the Marwick, Mitchell & Company report?

"A. Well, they got them from the company as we assumed.

"Q. And you mean to say then that ought to read, this item on page 1 of Exhibit 21 ought to read 'estimated costs of each scale sold furnished to us through Marwick, Mitchell, Peat & Company by the figures which they took from the report of the company filed in this case,' is that what you mean to say that thing means?

"A. No, it means just what it says.

"Q. You have said there were no figures furnished you, Price, Waterhouse & Company, by the company, didn't you?

"Mr. Meads: I object. He has made no such statement at all.

"The Master: I understood he did make that statement, Mr. Meads, that he got nothing direct from the books, but that he got his information from Marwick, Mitchell & Company's report.

"Mr. Meads: I don't think the witness has said that yet.

"The Master: Is not that what you said?

"The Witness: The cost figures as regards the cylinder scales were taken from Marwick, Mitchell & Company's report and we
714 ascertained where they were gotten from and how they were gotten.

"The Master: As I understand this witness's testimony, his figures are taken from the report of Marwick, Mitchell & Company.

"Mr. Zane: We figured it all out here just a little while ago.

"The Witness: Either from the books or from — source because, if the Master will notice here, in some places it is marked with a star and it says 'These costs are based on the nearest figures as shown in Mr. Zolg's testimony.' In other places there is no star which leads me to assume there must have been some basis on which to base those costs, and I went no further.

"Mr. Zane:

"Q. Let me put another question. No cost of any scale sold, that is, a cylinder scale, was furnished you directly by the company or by any one speaking for the company?

"A. Well, now, in that cost book that was here on that day that was produced that Monday you will find some costs in there with regard to cylinder scales, but except in paging through them we never had occasion to use them, assuming Marwick, Mitchell & Company had gone through so far as the cylinder business and was doing the same thing we were doing.

"Q. You didn't rely upon those cost sheets as to any cost of cylinder scales in that figure you have put in your account, $124,068.65, did you?

"A. No, sir, because they had already established——

"Q. You have answered it 'No,' and then just stop. Now, the next item you have here is the amount by which the actual cost in the aggregate exceeded the aggregate estimated cost pro-rated on the basis of the estimated costs as above $18,999.19. That item is added on the assumption that the costs that you have estimated for fan scales are correctly estimated?

"A. The same degree of correctness as the estimate of cylinder scales.

"Q. Exactly. And if your estimated figure for costs of fan scales should be incorrect, then your figure of $18,999.19 added to the cost of cylinder scales is incorrect?

"A. Yes. Not only that, but all the costs would be incorrect.

"Q. You say all the costs would be incorrect?

715 "A. Yes.

"Q. So that your whole figure, all your figures there as to costs, depend upon the assumption that that estimated figure of $122,349.92 for fan scales is a correctly estimated figure?

"A. No, it does not.

"Q. Now, let us see the sheet upon which you made up the costs of fan scales.

"Now, have you your cost sheet for fan scales?

"A. I have the cost sheet that I used in using the same method that the Marwick, Mitchell & Company's costs were used. (Producing sheet.)

"Q. Now, in your exhibit 1 or on your page 1 of Exhibit 21 you state the number of fans net sold as 7643 scales, don't you?

"A. Yes, sir.

"Q. Where is that figure on this cost sheet?

"A. On the sheet right in front of you.

"Q. Where?

"A. Right there on the first page of that (indicating).

"Q. Now, on this working sheet of yours does the style number run clear across the page?

"A. Yes, sir.

"Q. You have a No. 2 scale figured at cost of labor and material $8.64?

"A. Yes, sir.

"Q. Where did you get that figure, $8.64?

"A. You will find just before the item '1' in the Net Sales column the notation 'as 110.'

"Q. What do you mean by that?

"A. The cost as near as could be found or as near as could be determined.

"Q. By whom?

"A. By us.

"Q. 'As 110,' what does '110' mean?

"A. 110 is another style of fan scale.

"Q. And you figured that as the same cost as No. 110?

"A. The same cost as 110 was used in the cost of No. 2.

"Q. 8.64?

"A. Yes, sir.

"Q. Now, where did you get that figure for the 110?

"A. You will find a notation in the Net Sales column just after the figure '110,' 'as of 210.'

716 "Q. Now, where did you get the information that the No. 2 scale was of the same cost as the No. 110 scale?

"A. When the question of labor and material——

"Q. From what source?

"A. I was going to tell you.

"Q. Just answer it, was it from a man, was it from an individual?

"Mr. Meads: Finish your answer when he gets through interrupting you, Mr. Witness.

"The Master: Answer the question. 'From what source' is the question.

"A. It requires an explanation if the Master please.

"Mr. Zane: Your Honor, I will object to this. I want a direct answer to this question.

"The Master: Can't you tell the source?

"A. It requires to be explained what the source was.

"Mr. Zane:

"Q. Did you get it from a man?

"A. I can't say it was from a man. It was from a combination of information received from practical men in the factory, from costs records and from their knowledge.

"Q. Who were the practical men in the factory?

"A. Mr. Reeves was one of the men and Mr. Mould was another.

"Q. Reeves and Mould, anybody else?

"A. I think they were all.

"Q. Now, from what other source did you get information as to the No. 2 scale being of the same cost in labor and material as the No. 110 scale?

"A. Well, I think Mr. Reeves and Mr. Mould were the only ones.

"Q. They are the sole source for No. 2 costing the same as No. 110?

"A. Yes.

"Q. How many scales in that year were made of No. 110?

"A. I do not know.

"Q. Well, how many have you in your account as sold during that year?

"A. Ten net sales.

"Q. And gross sales of how many?

"A. Twelve.

"Q. Now, did you get the information that the No. 110 cost the same as 210 from Mr. Reeves and Mr. Mould?

"A. Yes.

717 "Q. From any other source?

"A. No.

"Q. Now, where did you get the cost, $8.64, for the No. 210 scale?

"A. You will notice opposite the figure "9" in the Net Sales column it says "as 413," meaning that the cost of the 413 was applied in the case of 210.

"Q. Where did you get the information that 413 cost the same in labor and material as 210?

"A. Mr. Reeves and Mr. Mould.

"Q. Now, where did you get the information that 413 cost $8.64?

"A. In the column marked "Net Sales" opposite the figure "31," the date "June 10, 1913, $8.64," indicating that that figure was taken from so-called cost sheets which are on file in the company's office.

"Q. At cost sheet for June 10, 1913?

"A. Yes, sir.

"Q. You assumed that it cost the same to manufacture a 413 at June 10, 1913, as it did to manufacture it in the year 1911?

"A. I did not assume it. It was the nearest date to 1911 which I could get a cost of that type of scale.

"Q. And you assumed that cost for the year 1911?
"A. I assumed that there was very little change, if any, in that price.
"Q. Well, you assumed that cost, didn't you, for 1911?
"A. It was assumed, yes, the figure was used.
"Q. And therefore you assumed that that was the cost of 1911, didn't you?
"A. Yes.
"Q. Now, your No. 3 scale is arrived at in the same way, is it?
"A. Yes, sir.
"Q. Now, in that year of 1911 there were sold one scale of the No. 2 type and six scales of the No. 3?
"A. Yes, sir.
"Mr. Zane: Now, what became of that book of cost sheets that was here the other day?

(Witness produces book.)

"Q. Now, will you turn to the page which shows the cost of the 413 scale in June, 1913?
"A. Here it is. (Indicating page in book just produced by Mr. Zolg.)
718 "Mr. Meads: What is this book called, Mr. Witness, so the record will show *that* this is?
"A. It really has different names. It is called "Lists of employes. Estimated costs and piece work price sheets on abandoned parts. Time keepers"—I don't know what that next word is, but I would call them cost sheets or guide costs is really the title of the sheets contained in the binder.
"Q. How many of these 413 scales were sold according to your statement during the year 1911?
"A. Three.
"Q. Now, this computation of costs is based on the cost of 100 scales, this paper that you have shown me contained in this binder?
"A. I think it is, yes. Let me look at the sheets first.
"Q. Well, look at them.
"A. Yes, these costs are predicated on 100 scales.
"Q. On 100 scales manufactured?
"A. Yes, sir.
"Q. Now, those three scales, 413, did you know whether they were gold or what finish they were?
"A. No, sir.
"Q. You did not?
"A. No, sir.
"Q. You assumed that they were all gold?
"Mr. Meads: I object, he has not said any such a thing.
"Q. You took the cost of a gold scale, didn't you?
"A. That's the only cost we could get on a 413.
"Q. You did take the cost of a gold scale, didn't you?
"A. You asked me if I assumed that they were all gold. I said I used the cost of gold, that's the way I answered.

"Q. And by taking the cost of a gold scale you assumed that that was the cost of these three scales, by using the cost of a gold scale, didn't you?

"A. Approximately.

"Q. You did it exactly?

"A. Because I say I used the cost of a gold which was the nearest one I could get is no reason to say that's the cost of the three scales.

"Q. That's the result of your estimate, is it not?

"A. Yes.

"Q. Now, did you form any judgment as to what it cost to manufacture three scales as compared with one hundred scales, the relative cost?

719 "A. I had no consideration for it at all, in this particular case, gave it no consideration.

"Q. Your figure is $8.64 per scale, is it not?

"A. Yes, sir.

"Q. Did you know whether these three scales had a reflector or not, these three scales, 413?

"A. I did not.

"Q. You saw that the cost of a scale with reflector was $8.96, didn't you?

"A. Yes, sir.

"Q. Will you tell me how many different types of fan scales there were included in this number of net fan scales sold on page 1 of Exhibit 21, viz., 7,643 fans, how many different types are represented in there?

"A. I will have to refer to my working papers and figure it.

"Mr. Zane: Well, your Honor, it is about adjourning time, and if Mr. Bowman would be willing to do so——

"The Witness: I have it now. There are approximately 192 styles of fan scales.

"Q. 192 different styles?

"A. Styles, yes.

"Q. Of fan scales represented in this 7,643 net fan scales?

"A. Yes.

Mr. Zane: Now, I was going to say this, your Honor. We would want to know from this sheet how many of these types he gives a figure, cost figure for, and whether that cost figure for the types for which he gives a cost figure is taken from this cost sheet book here and how many of these type numbers are referred to some other type number as giving the cost.

"(To the witness:) You can take that off from these sheets and save us a great deal of time tomorrow if you will do it tonight.

"Mr. Meades: I think we can do that, your Honor.

"Q. Mr. Bowman, how many types of fan scales have you the cost figpre for?

"A. You mean by that those cost sheets?

"Q. Yes.

"A. There were twenty-six styles.

"Q. Twenty-six types. Will you give me those types shown?

"A. 403, 404, 405, 413, 414, 415, 416, 418, 423, 424, 425, 453, 454, 455, 456, 457, 458, 503, 504, 505, 603, 604, 605, 623, 624, 625.

720 "Q. Now, from where were your cost figures for those types taken?

"A. They were taken from that binder of estimated cost sheets.

"Q. Now, have you got on your schedule there, your working sheet, the date of each estimate?

"A. I think so. 403 is April 1, 1912; 404 the same; 405 the same; 413 to 458 inclusive, June 10, 1913; 503 to 605 inclusive, April 1st, 1912.

"Q. April 1st, 1912?

"A. 623-625 inclusive, October 10, 1912.

"Q. The estimates in each case are made on the cost of one hundred scales, are they not, in the sheets?

"A. I think they are.

Q. Now, will you read from your working records the net number of scales sold of each of the types of which you had the cost taken from these sheets, beginning with 403?

A. 403, 8; 404, 8; 405, 905; 413, 3; 414, 10; 415, 43; 416, 1; 418, 10; 423, 31; 424, 38; 425, 34; 453, 349; 454, 618; 455, 15; 456, 90; 457, 115; 458, 7; 503, 10; 504, 3; 505, 201; 603, 2; 604, 13; 605, 87; 623, 31; 624, 50; 625, 73.

Q. Now, all the other types of the 192 which you have mentioned are types which you put down as costing the same as one of these types of which you have given the figures?

A. Yes, sir.

Q. And for the fact that they were of the same cost as one of those types you relied upon the statement of Reeves and Mould?

Q. Now, I wish you would tell me the number of scales sold and the types beginning with No. 2 there (indicating), the number of scales sold.

A. No. 2, 1,——

Q. Wait a minute. And while you are doing that just give me the number of scales to which the cost of this particular scale you are reading is equal to. For instance, this is 110, is it Not?

A. You want the style number?

Q. The style number.

A. The number of scales sold?

Q. Yes.

A. And as to what cost we used?

Q. What cost.

721 A. All right, I will give them to you in that order.

Q. Yes, in that order.

A. Style 2, 1, as 110; Style 3, 6, as 110; Style 4, 1 as 153; Style 9, 13, as 403; Style 10, 2, as 404; Style 11, 1, as 405; Style 12, 10, as 613; Style 16, 2, as 623; Style 21, 2, as 23; Style 23, 1 as 623; Style 24, 1, as 623; Style 25, 7, as 125; Style 28, 1, as 153; Style 30, 25, as 153; Style 32, 1, as 153; Style 35, 2, as 153; Style 37, 3, as 155; Style 40, 2, as 153; Style 41, 1, as 154; Style 42, 1, as 155;

Style 43, 2, as 153; Style 44, 3, as 151; Style 45, 1, as 155; Style 50, 9, as 153; Style 51, 10, as 154; Style 52, 3, as 155; Style 53, 31, as 153; Style 54, 11, as 154; Style 58, 1, as 153; Style 60, 5, as 154; Style 61, 5, as 154; Style 62, 12, as 123; Style 63, 5, as 124; Style 64, 8, as 125; Style 65, 12, as 123; Style 66, 10, as 124; Style 67, 40, as 123; Style 68, 23, as 124; Style 69, 3, as 125; Style 70, 8, as 67; Style 71, 3, as 68; Style 72, 6, as 69; Style 73, 8, as 69; Style 74, 2, as 69; Style 75, 15, as 153; Style 76, 21, as 153; Style 77, 7, as 153; Style 78, 96, as 253; Style 79, 150, as 254; Style 80, 5, as 255; Style 101, 11, as 403; Style 102, 3, as 404; Style 103, 7, as 405; Style 104, 7, as 403; Style 105, 16, as 405; Style 106, 322, as 405; Style 107, 12, as 407; Style 108, 38, as 404; Style 109, 227, as 405; Style 110, 10, as 210; Style 111, 105, as 211; Style 112, 71, as 212; Style 113, 1, as 110; Style 114, 2, as 111; Style 115, 3, as 112; Style 116, 14, as 123; Style 117, 8, as 124; Style 118, 3, as 125; Style 122, 1, as 123; Style 123, 2, as 423; Style 124, 27, as 424; Style 125, 26, as 425; Style 126, 1, as 125; Style 127, 1, (in red) as 123.

Mr. Meads: What do you mean by that?

A. That's a reduction. Style 128, 2, as 125; Style 131, 6, as 79; Style 132, 197, as 79; Style 133, 8, as 79, Style 138, 1, as 154; Style 139, 1, as 155; Style 143, 3, as 153; Style 144, 11, as 154; Style 145, 1, as 155; Style 146, 20, as 153; Style 157, 8, as 154; Style 148, 5, as 155; Style 150, 64, as 78; Style 151, 260, as 79; Style 152, 20, as 80; Style 153, 39, as 53; Style 154, 62, as 54; Style 155, 4, as 55; Style 156, 29, as 153; Style 157, 13, as 154; Style 158, 3, as 155; Style 159, 2, as 158; Style 163, 1, as 153; Style 164, 1, as 154; Style 173, 5, as 153; Style 174, 8, as 154; Style 175, 2, as 155; Style 210, 9, as 413; Style 211, 24, as 414; Style 212, 88, as 415; Style 223, 27, as 423; Style 224, 81, as 424; Style 225, 129, as 425; Style 226, 31, as 446; Style 227, 33, as
722 447; Style 288, 65, as 448; Style 243, 14, as 153; Style 244, 4, as 153; Style 245, 3, as 153; Style 246, 4, as 253; Style 247, 2, as 254; Stye 248, 1, as 255; Style 253, 224, as 453; Style 254, 138, as 454; Style 255, 4, as 455; Style 256, 136, as 456; Style 257, 253, as 457; Style 258, 4, as 456; Style 263, 1, as 253; Style 264, 2, as 254; Style 265, 1, as 255; Style 266, 4, as 256; Style 267, 4, as 257; Style 268, 6, as 258; Style 272; 1, as 253; Style 273, 17, as 254; Style 274, 3, as 255; Style 276, 36, as 254; Style 277, 16, as 255; Style 278, 6, as 256; Style 409, 1, as 405; Style 514, 2, as 10; Style 515, 1, as 10; Style 523, 7, as 110; Style 524, 33, as 111; Style 525, 14, as 112; Style 556, 157, as 150; Style 557, 688, as 151; Style 558, 37, as 152; Style 613, 3, as 110; Style 614, 21, as 111; Style 615, 16, as 112; Style 653, 27, as 78; Style 654, 38, as 79; Style 655, 22, as 80; Style 656, 10, as 78; Style 657, 19, as 79; Style 658, 10, as 80;

Q. Now, have any of these that you have read been in red except the one?

A. Just that one.

Q. Now, will you give me of your estimates beginning with 403 those that you gave me first where you have the figure put down there, what is the estimated cost of 403?
A. What is the estimated cost?
Q. Yes.
A. $4.65.
Q. Now, 404?
A. $4.51.
Q. 405?
A. $5.44.
Q. 413?
A. $8.64.
Q. 414?
A. $8.72.
Q. 415?
A. $10.04.
Q. 416?
A. $10.98.
Q. 418?
A. $12.38.
Q. 423?
A. $9.42.
Q. 424?
A. $9.88.
Q. 425?
723 A. $10.14.
Q. 453?
A. $11.07.
Q. 454?
A. $11.07.
Q. 455?
A. $12.15.
Q. 456?
A. $13.20.
Q. 457?
A. $13.19.
Q. 458?
A. $14.28.
Q. 503?
A. $4.31.
Q. 504?
A. $4.18.
Q. 505?
A. $5.10.
Q. 603?
A. $4.55.
Q. 604?
A. $4.41.
Q. 605?
A. $5.34.
Q. 623?

A. $7.68.
Q. 624?
A. $8.13.
Q. 625?
A. $8.40.
Q. In these figures you have given last did you take the figures of the scale ready for shipment or what did you take?
A. I do not recall whether the shipping cost was in there or not.
Q. I didn't ask for shipping cost. I said did you take the figure of the scale ready for shipment?
A. I do not recall.
Q. Now, from this cost sheet of Scales No. 403, 404 and 405 respectively you took the figures opposite the scale with reflector for 403, $4.65; for 404, $4.51; for 405, $5.44.
A. Yes, sir.
724 Q. Now, below that you see that the scale with the "3 stand" is $5.42?
A. Yes, sir.
Q. For 403, and $5.29 for 404, and $6.22 for 505?
A. Yes, sir.
Q. And the scale with the "5 stand" is one cent more in each case is it not, just one cent more?
A. Yes.
Q. Now, this book is arranged with first the sheets referring to cylinder scales, and following that the sheets referring to fan scales, are they not?
A. Well, I don't know exactly.
Q. Just glance at that and see if all ahead of this are cylinders.
A. That appears to be the arrangement.
Q. And all following that are fans, are they not?
A. It appears that they are, yes. There does not seems to be any definite arrangement of the book. There are some sheets in the back which are marked "No. 385 spider, abandoned," "No. 380, No. 6 saddle, gold."
Q. Is that the cost of the whole scale? It does not appear to be, does it?
A. No.
Q. There are a lot of sheets in the back marked "abandoned," are there?
A. Yes.
Q. Some of them are cylinders and some are fans?
A. They appear to refer to cylinder scale parts and fan scale parts.
Q. And fan parts?
A. Yes.
Q. Those are parts?
A. Yes.
Q. Now, where do you find the date, April 1st, 1912, for the estimate on the 403, 404 and 405, where do you find that date?
A. (Witness examines book.)
Q. There is no date anywhere on the four sheets for 403, 404 and 405, is there, can you find any date?

Mr. Meads: What is that date, you have a date there. (Referring to page which witness is examining.)

A. It is one sheet marked "Packing scale for shipment, candy scales."

Mr. Zane:

Q. And refers to what sort of items?

725 A. Materials used in shipping, packing and shipping.

Mr. Meads: Immediately following the 403, 404 and 405, is it?
Mr. Zane: No.

Q. What does it follow?
A. It follows the sheets that have the costs of 603, 604 and 605.

The Master: You have an unanswered question back there, Mr. Zane.
Mr. Zane: Yes.

Q. Do you find any date on the sheets 403, 404 and 405?
A. No, sir, the date is not stamped on them.
Q. And what is the last date before that that you see?
A. On the sheet preceding that one is marked "587A Scale, type connection, January 30, 1913."
Q. Now, do you find any date on the sheet for scales No. 503, 504, 505 or the scales 603, 604 and 605?
A. Not on those sheets themselves.
Q. Now, you do find the date April 1st, 1912, on a sheet estimating the cost of packing materials, don't you?
A. Yes, sir.
Q. The first dated cost sheet for scales is in January, 1913, is it not?

Mr. Zane:

Q. Yes. What do they refer to?
A. No. 381C scale, it means cylinder I think.
Q. That's marked December 31, 1912?
A. Yes, sir.
Q. Those are for cylinders. Now, the next date after that is January 1913, is it not?
A. The several next sheets are marked January 6, 1913, then January 1914, then back again to December 31, 1912, then again to January 14, 1913, and so on.
Q. Now, will you find the cost sheet for 623, 624 and 625 please?
A. (Witness examines book.)
Q. Now, you don't find any sheet for 623, 624, 625, either of them in that book?
A. No, I don't see them in here.
Q. Now, where did you get the costs for these?
A. Well, I don't exactly recall. In some similar document to this. I don't know just where, I can't remember now.

726 Q. Then there is something that has not been produced here, is that it?

Mr. Meads: Here you are. I will help you (reading): "Fan 620, 621, 622, 623, 624 and 625."

The Witness: Here you are. (Indicating.)

Mr. Zane:

Q. Now, is there 623, 624, and 625 there?
A. No, the figures 623, 624, and 625 are not there.
Q. Somebody has attempted to doctor this book I suppose?

Mr. Meads: Nobody has attempted. There is a marker put in the book. On the marker is the "Fan 620, 621, 622, 623, 624 and 625."
Mr. Zane: That's what I say, your marker is wrong.
Mr. Meads: No, you said somebody had been trying to doctor the book.

Mr. Zane:

Q. You don't find any cost sheet for 623, 624 and 625, do you?
A. Well, it is not marked on that cost sheet, that's true.
Q. Now, when Mr. Meads said he would help you and show you the sheet he was simply leading you into a bog, was he, there is no such a thing?

Mr. Meads: Answer.

A. It is "620, 623 and 622."

Mr. Meads: So instead of "623, 624 and 625" the witness is in error and it is 620, 621 and 622, that's what it amounts to.
Mr. Zane: That's quite an error.
Q. Now, where did you get the figures for 623, 624 and 625, who told you that?
A. Well, I have a notation on my rough sheets here, "October 10, 1912.
Q. Yes, you have given us that.
A. "As of 623, 624 and 625" and I think if you will apply these figures against the 620, 621 and 622 you will find that I used the cost——
Q. You used the cost for 620, 621 and 622 for 623, 624 and 625?
A. Yes, sir.
Q. That's what you actually did?
A. Yes, sir.
Q. And the sheet for 620, 621 and 622 is dated October 10, 19—what?
A. —12.

727 Q. Now, beyond what you had on these sheets here and what you were told by Reeves and Mould you had no information as to costs of fan scales?
A. Yes, sir.

The Master: Fan scales?
Mr. Zane: Fan scales.

Q. Did you make any comparison between these cost sheets and the price list of Toledo scales to see what the differences were between different type numbers of fans?
A. No, sir.
Q. Or what the differences were, the selling prices of fan scales of different types?
A. No, sir.
Q. Now, those cost figures obtained in this way are the cost figures which you obtained by multiplying the number of the different types of scales by the particular cost which you have thus ascertained for that type, and adding the total together gave you $122,349.92?
"A. No. The overhead expense was to be added to that cost.

This gave $72,500.22, the direct material and labor in fans, from those cost figures. To that was added 68.758%, and that gave $122,349.92." We then added together the manufacturing cost of cylinders and the manufacturing cost of fans, making a total of $246,418.58. We subtracted that figure from the total manufacturing costs as found in the accounts in the general ledger and which total $284,153.55. The difference in these two sums was $37,734.98 which was divided between fans and cylinders on the basis of 49.651% of that amount to fan, and 50.34% of that amount to cylinder. That ratio was arrived at by applying the estimated cost of both fan and cylinder to the total estimated cost of cylinder and fan scales so that we divide for cylinder scales $246,418.57 into $124,068.00 giving 50.34%, and divide $246,418.57 into $122,349.92 giving 49.651%.

"The figure $143,067.84 on the first page of Exhibit 21 of Defendant is an estimate. Mr. Seatree is the author of the words, 'The amount by which the actual cost (in the aggregate) exceeded the aggregate estimated cost.' I don't know just what it means."

"On page 2 of Defendant's Exhibit 21 with reference to the capital
728 invested I have already given the items on which the calculation of 5% was made. This was read from a sheet which was written up at Mr. Seatree's dictation from the trial balance and the items which he read such as, preferred stock, common stock, bonds, floating indebtedness, etc., are taken from the liability side of the statement. I think the trial balance was copied from a trial balance which M. M. P. & Co., drew off the books and one of our men checked it with the ledger and presumably found it correct. The witness produced a trial balance and said it was off M. M. P. & Co's papers, and checked with the ledgers, and the witness was asked as to the assets balancing liabilities.

Then testimony as follows:

"Q. Can't you look at this and tell me the items that would go in, can't you tell me the items right off this sheet of assets?
"A. Yes, I can tell the assets, quite so.
"Q. Yes, Now, just be good enough to tell me what they are."

A. Cash $31,309.21, Bills Receivable $577,224.94, Agents' Ledger $93,311.37.

Q. All right, go on.

A. Salesmen's Ledger $27,421.29.

Q. Just wait a moment. Agents' Ledger means what, accounts receivable from agents?

A. I presume it does.

Q. And the next, $27,421.29, means what?

A. I presume it means customers' accounts receivable, I don't know. I have not investigated exactly what it means.

Q. Well, you know enough to know what the agents' ledgers and what the customers' ledgers are, don't you?

A. Oh, yes.

Q. Now, go on.

A. —.

Real Estate and Buildings	$40,326.57
Machinery	23,766.59
Tools and Patterns Inventory	56,032.33
Factory Equipment	12,158.66
Chart Stones	11,979.24
Office Furniture and Fixtures	13,848.09
Agency Office Fixtures	9,623.84
Sample cases	14,773.25
Power Wagon Account	1,750.00
Kitchen Equipment	277.16
Vulcanizer Inventory	3,865.63

729

Material Inventory	69,220.12
Factory Supplies Inventory	9,380.13
Packing Crates Inventory	1,562.60
Power, Heat and Light Inventory	185.50
Advertising Inventory	1,573.71
Stationery and Office Supplies Inventory	3,185.22
Lumber Inventory	84.12
Agents' Supplies Inventory	470.98
Platters, Scoops and Stands, Consigned Inventory	1,525.25
Scale Inventory	170,912.75
Patents	250,000.00
Prepaid Taxes	463.33
Prepaid Insurance,	2,169.87
Unsubscribed Stock——	

Q. Just wait a minute. Since you only gave the issued capital stock you would not give the unsubscribed unless the other would be put on the other side?

A. As I understood your question, you wanted me to read the assets as I saw them on the balance sheet. I don't know what your purpose it.

Q. You knew what you read for the investment?

A. I told you that was done at the dictation of Mr. Seatree, and

as for the purposes of it and why it was done I knew nothing of, and I am not competent to testify on it.

Q. All right. Unsubscribed capital stock?

A. I continue to read this with the understanding I am simply quoting the balance sheet as it is shown on this trial balance. I know nothing about what his idea was in putting those figures together.

Q. Is that all, Unsubscribed Capital Stock $283,800?

A. No, there are a number of other accounts which appear to be asset account.

Q. Now, what other assets have you there in the smaller amounts, have you got a total for them?

A. Well, the total of the assets which I have read from this copy to that point are $1,712,831.75 which deducted from the total of the——

Q. Well then, there are a number of smaller matters which bring the total up to $1,732,181.30?

A. Yes, sir.

730 Q. Now, in addition to that, what other assets are put down?

A. Well, underneath the asset column on the last page of this trial balance is marked "Canadian Ledger" and the total——

Q. "Net Canadian Ledger," did you see that ledger?

A. I think I have seen it.

Q. And you knew that on the Canadian Ledger there were no such items as bills receivable or accounts receivable, didn't you?

A. I don't recall I gave that any thought.

Q. You didn't find any? Well, read me the items taken off the Canadian Ledger for the total, the balance sheet.

A. Reading from this trial balance:

Material Inventory	$10,891.62
Factory Supplies Inventory	590.24
Factory Equipment	4,757.89
Machinery	4,685.76
Sample Cases	355.00
Packing Crates Inventory	216.52
Furniture and Fixtures	1,506.22
Tools and Patterns	1,930.12
Stationery and Office Supplies	285.46
Canadian Scale Inventory	39,358.03
H. S. Lee Expense Fund Account	1,000.00

Mr. Zane: Now, Mr. Zolg, will you produce the Canadian Ledger for 1911.

(Mr. Zolg produces Canadian Ledger for 1910-1911.)

Q. Now, when you look on the Canadian Ledger do you find any liabilities at all?

A. (Witness examines ledger.) Apparently not.

Q. So that you infer, do you not, that the Canadian Bills Receiv-

able and Customers' Accounts and Agents' Debit Balances if any, are carried on the general ledger of the Toledo Scale Company?

A. I assume so, yes.

Q. Well, why do you assume that?

A. They do not appear in the Canadian Ledger Trial Balance.

Q. And therefore they must be on the trial balance of the Toledo Scale Company's general trial balance?

A. I would say they were.

"On page 3 of Exhibit 21 in the second column opposite the word 'together' we show the figure in the second column of
731 the fan scale business or $208,421.96. This was balanced against the labor, material and overhead expense account. When we add together the material, labor and overhead expenses of cylinders, $133,599.57, and this $208,421.96, we have a total of $342,021.53. I think I prepared that sheet. I think it was prepared at the outset by taking M. M. P. & Co.'s figures as they showed the cylinder business, and treating the fan as a re-idue.

"Mr. Seatree gave the title and information which is contained on the page in this exhibit, but I supplied the figures. At the bottom of that statement is shown a gain of $95,675.43 in cylinder business, and a loss of $95,182.55 in fan business, and it is before charging interest. The net gain between the loss on fans and the gain on cylinders is $496.88.

Then testimony as follows:

"Q. Yes, but everything is thrown into fan and cylinder business here, the whole business, is it not, on this statement?

A. No.

"Q. Don't you see you give new cylinder business the Marwick, Mitchell figure and give the residue to fan?

"A. As regard the two kinds of business, yes, sir.

"Q. And the two things put together make the whole business don't they?

A. Yes, sir, so far as they go.

It does not represent the whole business. There is wanting the loss on the vulcanizer business, profit on Canadian scale business, royalties received, interest on borrowed money, bond interest. All the second-hand business is thrown into cylinders and fans, and on that business the net gain is $496.88. M. M. P. & Co. followed the general ledger and what you call the combination cash journal. The reconcilement of the figure $496.88 as a gain with the figure on our preceding page of $41,110.98 as a gain before charging interest, with the items taken out, makes necessary several additions and deductions. To the $496.88 add Canadian scale business profit $24,080.32, royalties received $1,292.71; then deduct net loss on vulcanizer business, $4,774.86, deduct $50,000 interest on capital invested, then deduct losses on agents' and customers' on cylinders $24,016.62, and fan $15,549.62, and second-hand $3,574.09. I think that should
about give you the figure. Then you must add back $24,-
732 432.90 representing interest on bonds and borrowed money, which is superseded by the addition of $50,000 interest on capital, and I think that will give the figures.

On Plaintiff's exhibit 47 the inventory of new scales January 1, 1911 is shown as $185,633.88. On the same exhibit we show the inventory of new scales on December 31, 1911, $140,289.19."

The witness referred to a sheet and said the statement is an inventory, scales, January 1, 1911, department assembly room, upon which is shown a recapitulation amounting to $64,895, which represents the list prices of the new scales at the factory. On January 1, 1911 these scales went into the inventory at $18,025.62. The rest of the inventory was obtained as testified to on previous occasions, from the trial balance book. Then inventory of Toledo scales, marked "Recapitulation" appears to be $525,271. These scales then went into the inventory at $167,258.26. There was no division made on these inventories as between cylinder and fan scales. The inventory of scales which was made up on December 31st, 1911 from the same two books show the list valuations of factory scales $34,470.00 which went into inventory at $11,490.00. The U. S. Consignment scales, list valuations $385,159.33, went into the inventory at $128,386.44. The South American Consignment went in as $412.75 and at the beginning of the year at $350.00.

"If the scales at the beginning and end of the year are valued above the cost of production then we have increased the cost of production by taking the values here given in these inventories. The average percentage used in the valuation of consignment scales as compared to list prices is 27.77% and at the end of the year they were all carried at one-third of the list price.

Redirect examination.

By Mr. Meads:

"When I testified under cross examination at Toledo that I had allocated both allowances and commissions I meant that the allowances and commissions charged during the year were allocated by me between cylinder, fan and second hand business, not however, with reference to the time at which the scales were entered in the books. The commissions in the statement rendered by M. M. P. & Co. and appearing in the commission account in the year 1911, were
733 not in that account allocated as to when the scales were sold on which those commissions were entered. For the purpose of illustrating a transaction where the commission and scale were entered as of different dates, we refer to an account in the customers' ledger A. F. Barnes, located at Memphis, Shelby County, Tennessee, and which has been marked for identification as Defendant's Exhibit No. 24. "The witness read into the record the said sheet, which is as follows:

D. & S. 4/4/11.*

Toledo Computing Scale Co., Toledo, Ohio, U. S. A.

Order Dated 12/19/10.
Bills Receivable Register.
Dun —; Bradstreet 12/21/27. Date Shipped 1/24/11.
Not in our record.*
4 WB. Sold to A. E. Barnes at Memphis, Tenn., Shelby Co., via to be del'd by agt. Sales Agent- T. W. Leidy, L. S. Miller. Collect Through T. W. Leidy. Terms (F. O. B. Toledo.) Cash $10—Bal. Monthly. When to Ship —. Order No. —. Commission, —. Payments secured by note. S.

P. 3 L. 30.*	Quantity.	Style.	Finish.	Factory No.	Special.	Toledo Computing Scale.	Amount.
TWL 52 50. Dec. 31, 1910.	1	381	Blue.	80087	Chart-C-. 12/21/20	Cr. by Cash & Note.....	150.00
Dec. 31, 1910. 18105.							150.00

Note Record.

Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.	Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
32M	2	24	11	14 00	Apr. 1, 1911	....	7	24	11	14 00	Nov. 25, 1911
....	3	..	..	14 00	Apr. 11, 1911	....	8	..	..	14 00	
										6.00	11-25-11*
....	4	..	..	14 00	Apr. 26, 1911					8.00	1-18-12*
....	5	..	..	14 00	Nov. 25, 1911	....	9	..	..	14 00	Jan 18, 1912
						....	10	..	..	14 00	
										3.00	1-18-12*
....	6	..	..	14 00	Nov. 25, 1911					11.00	1-30-12*
						....	11	..	..	14 00	Jan. 30, 1912

Checked by E. K. Feb. 28, 1911. 839. Sales Memo. —.

Compare.*
For Iden.*
Def. Ex. 24.*
Admitted.*

*Insertions in Pencil (printed in black-faced type) appear on our record.

735 The date of the sale appearing at the top of the sheet opposite the caption 'Date shipped,' shows the year 1911, underneath the word 'Factory No.' there is marked the date 'December 31, 1910, No. 18,105' which indicates the number of the voucher for the commission of $52.50 which went through the commission account on December 31, 1910, while the scale went through the next year. The effect of which would be to swell the 1911 sales and not charge those with commissions which appear in the year 1910. The amount of this commission, $52.50, appears on the left-hand side of the column headed 'Commission' over the salesman's initials which in this case 'T. W. L.' represents T. W. Leidy. The example which we have illustrated here in the case of a customer by the name of A. F. Barnes is not an isolated case as we have a number of similar cases.

"M. M. P. & Co. in the account presented by them do not attempt to fix and apportion to sales made in 1911 the commissions charged in 1910.

"I caused Mr. Hansen, who is in the employ of our firm, to make an examination of the books at Toledo to determine the overlappings in the months in which the commissions would be most likely to overlap, which would be the last three months of the year, and the commissions entered in 1910 on sales entered in 1911 would be the most frequent in those months, because as they sell their product, the report of the sale is made, but the shipment has not been recorded as yet, and the commissions are put through at the time the sale is reported. Then when the shipment is reported, either from the factory or branch office, they put through the sale of the scale, so that the commission would come ahead of the sale. This question of overlap was also true of allowances. When a sale of a new cylinder or fan scale was made by any of the company's agents, which involved a second hand scale taken in part payment, the credit for that returned scale or second-hand scale was never made on the customer's account until the scale had been reporten in, and sometime those overlaps would be anywhere from a month up, so that if may follow that a scale made in 1911 was not charged with the allowance in that year, because the allowance was not entered until 1912."

"Referring to the Customers' Ledger Accounts, customers' ledger sheet showing the account of Philip Bartos, Hackensack,
736 New Jersey, which was for the sale of No. 581 cylinder scale, factory number 92,809, sold on December 12, 1911, for $100. Terms of sale were: $25 allowed for No. 61 Dayton Scale, factory number 191,318, $10 cash, balance monthly payments secured by notes. The notes and cash were received and credited on December 16, 1911, and the balance due of $25 which represented the No. 6 Dayton scale was credited by an entry marked, 'exchanged scale in New York office, January 10, 1912, $25.' In this particular case there was no overlap of the commission. The commission was dated January 10, 1912, and amounted to $15. I will take that back. The commission and sale went through on the same day, but this January 10, 1912, indicates the date on which it was tranferred from a prospective commission to an actual commission. In other words,

the commission was available for payment because the sale had been consummated, so that there was no overlapping of commission but the overlap was in the allowance for the second hand scale. If our account sopped with 1911, the effect of this entry made in 1912 would be to give the business of 1911 more credit than they were entitled to by the amounts of those overlaps. To correctly show these profits it would be necessary to forward to pick up all the overlapping allowances, bring them back into the period at the end of the year and throw them out at the beginning of the year.

"Q. Yes. Now, in the items of Exchange Scale Allowances and Other Allowances for the year 1911 did the account of Marwick, Mitchell, Peat & Company take into consideration those allowances which were entered in January or any other month of 1912?

"A. No, sir.

"The Master: Do you mean they were entirely ignored?

"Mr Meads: They took the allowances of 1911 as if they applied entirely to 1911 business.

"The Master: But those allowances would appear in the next year?

"Mr. Meads: In other words, they assumed in their account that those allowances were entered on 1911 business where of necessity there were some brought forward for the last two months and carried forward in the next year in the same way.

737 "I will ask that this be marked for identification Defendant's Exhibit 25, this instrument about which the witness has been examined.

(Said Ledger account showing sale to Philip Bartos marked for identification Defendant's Exhibit 25, and is in the words and figures following:)

D. & S. 8-14-12.*

Toledo Computing Scale Co., Toledo, Ohio, U. S. A.

Order Dated 12/12/11.
Dun —. Bradstreet —. 12/16/19.
Sold to Philip Bartos, Vreeland Ave., Hackensack, N. J., Bergen County.
$25 allow- for No. 61 Dayton Scale No. 191318.
Collect Through —— ——, Agt. at ——.
N. Y. Office.*
L. C. 12-15.*
Apr. 11/13.*
Commission, —. B. Toledo.) $10 cash, bal. monthly payments secured by note.

Quantity.	Style.	Finish.	Factory No.	Special.
1	581	Blue	92809	Chart D. 12/16 Cr. by cash & Note.

L. C. 15.00
Jan. 10, 1912.
Cr. by Ex. Scale Jan. 10, 1912.
In N. Y. Office.*

*Insertions in Pencil (printed in black-faced type) appear on our record.

Note Record.

	Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
N. Y.	1-19	Jan.	12	12	9 00	May 29, 1912
	2-22	Feb.	12	12	9 00	Aug. 26, 1912
	3-21	Mar.	12	12	9 00	Dec. 6, 1912
	4-15	Apr.	12	12	9 00	Dec. 6, 1912
	5-20	May	12	12	9 00	Dec. 6, 1912

Frt. 44c.*
For Iden.*
Def. Ex. 25.*
Admitted.*

738 Bills Receivable Register.

Date Shipped, 12/12/11.
Sales Agent-, L. Chasman, John Huestner, J. L. Theobald.
When to Ship —— —, ——.
Order No. L.

	Amount.
Toledo Computing Scale	125.00
	100 00
Bal. due	25 00

Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
.....	Jun.	12	12	9 00	Dec. 6, 1912
.....				4.00*	12-16-12*
.....	Jul.	12	12	9 00	
.....				5.00*	4-11-13*
.....	Aug.	12	12	9 00	Apr. 11, 1913
.....	Sep.	12	12	9 00	Apr. 11, 1913
.....	Oct.	12	12	9 00	Apr. 11, 1913

Checked by G. B.
Sales Memo.
9004. Dec. 22, 1911.

"Q. Is the example from which I have read and about which you have been examined, this case of Philip Bartos, an isolated one?

"A. No, sir, there are a number of cases of similar nature.

"Q. If the overlaps in commissions which were charged in 1910 of sales entered in 1911 were identical in amount with the overlaps

*Insertions in Pencil (printed in black-faced type) appear on our record.

of commissions that were charged in 1911 on sales which were actually made in 1912, one would wash the other, would it not?

"A. Yes, sir.

"Q. And in the same manner the allowances, if the overlaps were substantially the same?

"A. Yes, sir.

"Mr. Meads: If the court please, I offer the two exhibits which the witness has identified here, marked for identification Defendant's Exhibit- 24 and 25.

(Said ledger accounts, heretofore marked for identification Defendant's Exhibits 24 and 25, so offered, received in evidence
739 and marked "Admitted.")

"Mr. Meads: That's all, Mr. Bowman.

Recross-examination.

By Mr. Zane:

"Q. Do you say, Mr. Bowman, that on the Marwick, Mitchell, Peat & Company account for the year 1911 they divide commissions without reference to when the sale was made, whether made in the year 1911 or some other year?

"A. Yes, sir.

"Q. On the Marwick, Mitchell, Peat & Company account for 1911 they don't have a commission allowed on every sale of every Cylinder Scale made in that year, do they?

"A. I think they do. I think they use a figure of something like $39.87 to be applied against all Cylinder Scale sales.

"Q. Yes. So they did allow a specific commission on every Cylinder Scale sold in that year, didn't they?

"A. Using an average they did, yes.

"Q. Well, whether they used an average or whatever it was, they allowed a specific commission on every Cylinder Scale sold in that year, didn't they?

"A. Why, I would say so, yes.

"Q. So that it is not a fact that they allowed commissions in 1911 on sales made in 1910, that is not true, is it?

"A. Yes, it is.

"Q. How do you make that out?

"A. Well, they used a figure of $39.87.

"Q. Yes.

"A. Now, I don't just exactly know where that figure came from, but the use of that figure absorbed that entire commission that had been charged during that year.

"Q. Was not their figure given as a figure for each Cylinder Scale, and was not their total Commission Account found by multiplying that figure for each scale by the total number of Cylinder scales made in the year?

"A. Yes, using that figure. Where that figure came from, of course I don't know.

"Q. You don't know now?

740 "A. I don't recall now. It seems to me, if I remember correctly, that that figure was taken as being a figure figured by Mr. Zolg, as being an average commission. Now, I won't be certain about that.

"Q. Don't you know that Mr. Zolg stated in his testimony that on the account filed by him in the action the average commission on each Cylinder Scale was so much?

"A. I think it was.

"Q. They took the commission stated by Mr. Zolg and multiplied that commission on each scale by the total number of Cylinder Scales sold, didn't they?

"A. Yes, they simply used the figure; yes.

"Q. You saw the Marwick, Mitchell, Peat & Company account, didn't you?

"A. Yes, sir.

"Q. And the item of Commission to Agents there is stated in the account on the basis of Mr. Zolg's average, viz., at $37.49?

"A. Yes, sir.

"Q. Now, that figure is taken from the account filed by Mr. Zolg on behalf of the defendant in the action, is it not?

"A. I would assume that it is, reading that report, yes.

"Q. So that that figure is absolutely independent of any consideration as to when, as to whether a commission on a sale made in 1911 is entered in 1910, is it not?

"A. Oh, yes.

"Q. So that on the Marwick, Mitchell, Peat & Company's account they allowed an actual commission fixed by Mr. Zolg as the average commission on each Cylinder Scale in the year 1911 as their figure for the commission and they allowed that commission on each Cylinder sale made in 1911, didn't they?

"A. Yes.

"Q. Now, the same thing is true on their account for the eight months of 1912, that Marwick, Mitchell, Peat & Company allowed a commission on the sale of each Cylinder Scale made in that eight months?

"A. I don't know, Mr. Zane, I didn't examine into their report for 1912.

"Q. Look at their report for the year 1912 and tell me if

741 they didn't allow a commission on each Cylinder sale made in the eight months of 1912 (Handing witness account).

"A. Yes, on a basis of a figure amounting to $39.69 which was given them by Mr. Zolg.

"Q. Yes. Now, drawing your attention to the account of the sale to Philip Bartos, Hackensack, New Jersey, which sheet has been marked for identification Defendant's Exhibit 25, the date of the sale is, according to your statement, December 12, 1911, is it not?

"A. Yes.

"Q. Do you know what these figures "12/16/19" represent?

"A. Yes, sir.

"Q. What do they represent?
"A. The date the agent took the order.
"Q. Well, what is the 12/16/19" reduced to a date?
"A. December 16th.
"Q. What's "19"?
"A. I suppose it is just an oversight, not getting 1911 in there.
"Q. They had "19" then instead of "11," that's what the mistake is, is it not?
"A. Yes, that should have been a "1" instead of a "9," that would make it 12/19/11. It is just typographical error.
"Q. Now, don't you know that that is not true? They didn't take the order four days after they shipped the stuff.
"A. Let's see. I may be thinking of something else. You are reading and I am thinking now.
"Q. Just look at it, the date before the name.
"A. I was thinking. (Examines customer's account). The order is dated 12/12/11, I don't know what this 12/16/19 is.
"Q. You don't know what that means at all?
"A. No, I don't. I thought you had reference to the order date. That probably came through from the original, you see the original invoice when the carbon was made, and was put in there in error, but the date I had reference to when I said the date the order
742 was taken was December 12, 1911. You are reading from something else I didn't see.
"Q. Then you don't know what date 12/16/19 stands for?
"A. No, I don't. I assume it is an error in typewriting. The chances are on the original that date should appear and it is marked through on that sheet in error.
"Q. Now, when the sale was made it was sold for $125, was it not?
"A. Yes.
"Mr. Meads: Just look at the book before you answer.
The Witness: All right.

"Mr. Zane:

"Q. The Commission allowed on that sale was $15.00?
"A. Yes, sir.
"Q. The bargain that was made as to the sale was that the purchaser of the scale should pay $100 in cash and notes and pay the balance by means of an Exchange Scale valued at $25.00?
"A. Yes, sir.
"Q. Now, when this sale was entered on the books no Exchange Scale had been received?
"A. No, sir.
"Q. So that the entry on the books in that customer's account amounted to simply this, that he had turned in cash and notes $100?
"A. Yes, sir.
"Q. That was credited to him?
"A. Yes.
"Q. The cash and the notes he had signed?

"A. Yes.
"Q. And as the books stood he was debited to the Toledo Scale Company $25.00?
"A. Yes, sir.
"Q. The whole debit was $125.00?
"A. Yes.
"Q. And he was given a credit of $100.00?
"A. Yes, sir.
"Q. That left him indebted on account $25.00?
"A. Yes, sir.
"Q. That stood as then an account receivable of the To-
743 ledo Computing Scale Company, that $25.00, until the Exchange Scale came in January 10, 1912?
"A. Yes, sir.
"Q. Then on January 10, 1912, he was credited with $25.00 and Exchange Scales Account was debited or credited?
"A. Debited.
"Q. How much?
"A. $25.00. Exchange Scales Allowances Account was debited with $25.00.
"Q. Now, on January 10, 1912, when $25.00 was credited to the customer's account the company lost an asset by that entry of $25.00, didn't it?
"A. Yes, sir.
"Q. What asset did it gain in exchange for that $25.00, Accounts Receivable loss?
"A. A Second-Hand Scale of unknown value.
"Q. That Second-Hand Scale that it received went into the Stock Account and that was all there was to it?
"A. I don't know where it went.
"Q. Well, it went into the property of the company?
"A. Yes, became the property of the Scale Company.
"Q. And all that as done was to convert an asset, an account receivable of $25.00 into an Exchange Scale, an actual scale taken in exchange?
"A. Yes, sir.
"Q. On the account of A. F. Barnes which is marked for identification Defendant's Exhibit 24 where do you find the date of the commission?
"A. I am pointing to it. Under the account or under the column marked "Factory No." you see the date "December 21, 1910," and under it the voucher number "18105."
"Q. Did you consult the voucher?
"A. In this particular case you have reference to?
"Q. Yes?
"A. No, I did not.
"Q. How do you know that that is the date of the allowance of commission?
"A. The allowance for the commission usually appears on a

voucher and above it the date. That voucher number is simply a carbon copy of this particular ledger sheet.

744 "Q. Well, you are simply guessing at it, you don't know anything about it from your own knowledge?

"A. I am not guessing at it, I am telling you just what that indicates, that is, the voucher shows they originally carried the commission through on that day.

"Q. How do you know it, you never saw the voucher?

"A. Well, it is customary in their system of accounting to put their vouchers through that way.

"Q. You assume that is so because you have seen it in some other case?

"A. Yes, sir, a number of cases.

"Mr. Meads: I might say to counsel we will have the vouchers here.

"Mr. Zane: That's all."

JAMES HALL, a witness, called on behalf of the defendant:

Direct examination.

By Mr. Meads:

"I have been previously sworn in this case and have testified that Plaintiff's Exhibit 40 was prepared under my direction and now testify that the amount of commission shown as $357,427.55 was taken from Plaintiff's Exhibit #8, which was offered in evidence in Toledo. These figures were compared with the books of the company by Mr. Slater and he satisfied himself that the amount agreed with the account on the general ledger of the commissions charged to that account in the year 1911. When I have charged against cylinder scales a specific commission I have necessarily assumed that all the rest of the commissions was charged either against fan or second hand scales and 49.651% for fans being the relative costs.

"I have made no attempt to allocate or show anywhere in my account what proportion of the $357,427.55 as charged in 1912 or 1910.

745 Cross-examination.

By Mr. Zane:

"It is my recollection that Plaintiff's Exhibit #8 was one of the documents produced by Zolg as the yearly statement of the Toledo Company and prepared by himself. The figure as it appears in the account $357,427.55 is the total of Agents' Commissions and District Managers' Commissions found in this annual statement. I did not rely in any way upon that figure in fixing commissions on cylinder scales sold during the year 1911. I obtained the average figure on each cylinder scale sold from the testimony of Mr. Zolg and multiplied it by the total number of cylinder scales sold during that year. I did allow a specific commission on each cylinder

scale sold, and this was wholly independent and entirely separate of any commission account on the yearly statement.

Redirect examination.

By Mr. Meads:

"For the year 1912 I determined the figure for commission on cylinder scales by multiplying the average commission determined by Mr. Zolg by the number of scales sold. For the years 1910, 1909 and other years of the period the commissions were prorated against the sales and the total amount of commission- paid were taken from the trial balance sheets and we assumed when we prorated them between the sales that the commissions entered on the books in the year 1907 applied to the sales of the year 1907, so that we paid no attention as to whether the commissions were paid either before or after the year in which the sale was entered on the books.

"On page 3 of Exhibit 40, Basis No. 1 for the year 1911, the total commissions which were entered in that year according to my statement were $357,427.55.

"We have applied to cylinder scales $175,265.75, to second hand business $30,275.27, all of which appears on the same page. By adding the amount of these alleged specific commissions on cylinder scales to the amount which I have allotted to second hand scales then sum of two as $205,541.04 and subtracted from the total
746 commissions leaves a balance of $151,886.51, which according to my theory is the balance of the commission applicable to fan scales, so that in order to fix this amount as commissions applicable to the sale of fan scales in the year 1911, I must assume that $357,427.55 was commissions applicable to the sale of all scales in that year.

The gross cylinder scale business as shown by Exhibit 40 for the year 1911 is $725,671.39 divided into amount of commission, allowed according to my figure is $171,265.75 makes a rate of commission of 24.2%. The amount of fan scales, $475,770.27 divided into the commissions allowed on fan scales $151,886.51 gives a percentage of almost 32% which makes a difference in the rate of commission according to my figures on fan scales and cylinder scales of approximately 7.7%.

Recross-examination.

By Mr. Zane:

"In my accounting I did not attempt to arrive at anything except the commission on cylinder sales and for that in the year 1911 I took Mr. Zolg's figure.

"For the years 1908, 1909 and 1910, Mr. Zolg had given us no figure covering the average commission on cylinder scales sold so we accepted the amounts shown on the books and on their statements

and apportioned the whole of the commission account between the different kinds of business in the proportion of net sales.

Redirect examination.

By Mr. Meads:

"I took the books as true regarding the commission account by which I meant specifically the general ledger. I did not refer to the customers' ledger account although I know they showed commissions entered on the slip in some cases—whether in all I can't say.

"My figures for commission were taken from the general ledger and from the statements turned in by Mr. Zolg.

"On the general ledger it isn't shown anywhere that commissions are applicable to any particular sale, and so being not shown I did not by the general ledger or any other book trace to each
747 individual sale the commission applicable thereto.

WILLIAM ERNEST SEATREE recalled:

Direct examination.

By Mr. Meads:

"I was present in the City of Toledo when Mr. Bowman was being examined by Counsel for the Plaintiff as to split commissions and am familiar with the method followed in the preparation of our account dividing commissions in these cases in which two kinds of scales were sold and another scale taken in.

"In our analysis or allocation of the allowance accounts where an Exchange Scale was involved, dividing these allowances between the cylinder and fan scale business, we charged to cylinder or fan business respectively, the amount of the allowance according to the character of the scale, that is to say, whether it was a cylinder or fan scale. Where one new scale went out the charge for the scale in exchange of the new scale of course was made to that one scale. However, in this case where more than one new scale was sold and where the combination sale was divided either equally or unequally between cylinder and fan scales going out, it was obviously necessary to divide the allowances as between cylinder and fan scale business on some basis inasmuch as the allowance was part and parcel of a combined transaction. It was not divided on the books either in the general ledger or the detail records supporting the general ledger. This condition was met with by Mr. Bowman, and it was dealt with tentatively by Mr. Bowman and Mr. Zolg jointly. They discussed this situation, and it was a problem that was to be dealt with. They made a division on a certain basis, which was submitted for approval to me on my arriving at Toledo. In the meantime they had gone ahead and made the calculation. I gave it my consideration upon reaching Toledo and saw at once

that the method that had been employed resulted in an unduly large charge being made against the cylinder scale business. The division that had been made was to charge the allowance for the purpose of calculating that commission, against the higher priced scale which invariably is the cylinder scale, and as a consequence of that treatment the cylinder scale part of this combination transaction was in my opinion overcharged. Whereupon I ordered the calculation which had been made up to that time revised and as a result of this revision the charge ultimately allotted against the cylinder scale business was smaller than it was according to the original calculation. I gave them the formula by which the calculation should be made.

"The method that was followed in the first instance was to charge the allowance against the higher priced scale. These allowances which are made in such cases usually do not amount to the sum of the allowances that would be made in individual transactions. Illustrating a case for argument sake, an allowance of a certain returned scale where a cylinder scale is being sold was $40, and the corresponding allowance that would be made on exactly the same scale coming in in the event of fan scale being sold was $30; the two then will aggregate $60. In such instances, however, where the cylinder and fan go out together as a combined sale the total allowance made is not usually as much as $60. It might be $50. The problem was to divide the $50 between the cylinder and the fan. The method which I employed was to use the maximum allowance in the case of a cylinder scale which was $40 and the maximum allowance in the case of fan would be $30, the two together making $60. However, as they only allowed $50 I prorated the $50 between the cylinder and fan on the basis of what the maximum would have been in each case, or two-thirds and one-third. The result of that recalculation of our own figure was to reduce the amount of allowance that I charged in the first account against the cylinder scale business below what it would have been under the first calculation. The books made no distinction and concurrently with that I also adjusted the commission in a similar way. The commissions are all measured when they apply to the cylinder business by applying the allowance against a higher priced scale for the reason that they allow a little more commission on a higher priced scale than on a lower one, and the net result of the measuring on the commission is they get a little bit the best
748 of the agent. However, as I had made what I considered an equitable division of the allowances, I applied the same rule to the commissions which operated slightly in the other direction but the net result of the two was to reduce the charge against cylinder scale business.

"Certain charges in the accounts submitted by us as shown in Exhibit 21 and 22 are based on calculations on gross sales rather than net sales. These relate principally to the general administration expenses and also losses on agents' balances. The corresponding calcu-

lations made by M. M. P. & Co. were on the net sales according to their papers.

"These calculations were made by me on the basis of gross sales because in my opinion in the apportionment of expenses as between any two or more divisions of a business it is more proper to make the calculation that way because all the motions of doing the gross business have to be gone through whether the sale stays put or not, and if you apportion such expenses as between two or more divisions of the business on net sales, you would obtain an inequitable and in certain instances an absurd result. To illustrate, suppose I have two divisions of a business each doing a gross business of $500,000, the sum of the two being a million. One branch of the business for some reason or other, owing to defective product or otherwise, all the sales come back and none of them stay put. If the apportionment were made on the basis of net sales all expenses would be charged to the department of the business in which the sales did stay put and no charge would be made to the department of the business which didn't stay put notwithstanding the fact that you had incurred all the expenses of doing the business, whether it stayed put or not. As a matter of fact, there is probably a large expense appertaining to the business which comes back than to that which stays put, because you have the additional expense of handling it again.

"In this regard therefore I hold that the account submitted on behalf of the plaintiff is on the wrong basis. Of course it follows when an item comes back and is handled at different times and is sold twice it is in that sense double charged, and correctly as the motions have to be gone through twice.

750 "From the examination of the books and vouchers of the company for the year 1911 it is evident that some repossessed scales were sold as second hand and some sold as new, but assuming now to give the plaintiff in this case the benefit of every repossessed scale as being sold as a new scale, the net result would be to reduce the loss on cylinder scales by $2,942.98 and would correspondingly increase the loss on fan scales by the same amount.

"In the account as originally submitted I assume that all repossessed scales were sold as Second Hand and that they were so included on the books.

"Assuming that they were all sold as new rather than second hand, I would make adjustments by transferring back to new cylinder business $4,010.99, and to the new fan business $2,424.50, being the items which in my first accounting I had taken out of new cylinder and new fan scale business, which are shown on page 14 of Exhibit 22. This item of $4,010.99 is shown as transferred to the Second Hand business on page 2 of Defendant's Exhibit 22, and in like manner the $2,424.50 was added to the fan business making a total that is put back into new business $6,435.49 and which is consequently taken out of second hand business. Then I take out the forfeited installments appertaining to the new cylinder and fan scale sales, aggregating $23,809.34 shown on page 14 of Exhibit 22, $12,843.20 applying to cylinder business and $10,966.14 applying to fan business.

"The next item is commission relative thereto of $4,079.33 on the cylinder business and $3,432.71 on the fan business. The difference between these items and that of $7,603.54 as shown on page 14 of Exhibit 22 is $91.50 which is the commission appertaining to forfeited installments on second hand business.

"The next item which is transferred out from the Second Hand business, the assumed cost of repossessed scales which it was thought were included in the Second Hand business amounting to $36,435.27 and appearing in the manufacturing cost. The result of transferring this item back increases the amount of the discrepancy in the manufacturing cost as between the estimated manufacturing costs and the actual manufacturing cost. In other words, it increases the difference, $37,734.98, previously reported between the estimated cost and the actual cost. It increases it by that sum which is pro-
751 rated 50.439% for cylinders, and 49.651% for fans, being the relative costs.

"The next items is to transfer back the manufacturing cost of the cylinder and fan scale sales which were transferred the amounts being $1,068.69 for cylinder and $1,016.26 for fans. This latter also resulted in disturbing the difference between the two on the basis of 50.349% for cylinder and 40.651% to fans.

"The next items are smaller adjustments which were occasioned by the disturbance of the base figure. These adjustments in the commercial and selling expenses are required by reason of the disturbance of the original base figures occasioned by putting the sales of cylinder and fans amounting to $6,435.49 back into the new cylinder and fan business. This results in revising the Second Hand department and charging the cylinder and fan with the items shown.

"That net result of these adjustments is to increase the Second Hand department profits by the sum of $16,046.62 from which I deduct $1,826.45 previously reported, making a profit of $14,219.17 which prorated to cylinder and fan business on the basis of gross sales, to cylinder scales 60.71%, $8,632.13, and to fan business 39.29%, $5,587.04. The result of it all is that the cylinder business in the aggregate would get the benefit of $2,942.98; reducing the loss of cylinder business by that amount and increasing the fan in the same amount assuming that all the repossessed scales are sold as new.

"Q. Have you collated and grouped the figures about which you have testified?

"A. I did.

"Q. Have you such a sheet before you?

"A. Yes, sir.

"Mr. Meads: I ask the reporter to mark this Defendant's Exhibit 26 for identification.

(Said sheet of figures beginning "Memorandum of effect on the net results of the Cylinder and Fan Scale business for the year ending on December 31, 1911, as reported by Price, Waterhouse & Co." etc. marked for identification Defendant's Exhibit 26.)

"Mr. Meads: Now, I offer Exhibit 26 in evidence.

"Mr. Zane: I suppose being a modification of the original account, if the original account is not admitted, this would not be.

752 We make the same objection, and when the time comes we will argue the objection.

"The Master: Was the other exhibit admitted subject to the objection?

"Mr. Zane: Not yet.

"Mr. Meads: Then I offer all of Defendant's Exhibits up to this time.

"The Master: Let them be admitted subject to the objection.

"Mr. Zane: If it is understood, of course—we have not made our objections, but we can state them when we argue the matter as to the objections to the account.

"The Master: It may be so understood.

(Said accounts heretofore marked for identification Defendant's Exhibits 21, 22, 23 and 26, so offered, received in evidence subject to objections.)

"In making up our account the allocations we have made were specific sales in so far as the allowances related to cylinder and fan business but we did not put it back to that particular sale to which it related if it applied to another year. In other words, we allocated as to specific sales as between cylinders and fans but not as between years.

Cross-examination.

By Mr. Zane:

According to re-statement of the second-hand account as shown on Exhibit 26, the profit apportioned to cylinder scales is $8,632.13, and to fans $5,587.04. According to Exhibit 21, the loss on the cylinder business was $24,316.63, and on the revised statement it would be $21,373.65. According to the revised statement the loss on fan scales would be $29,927.07, instead of $26,984.09, so that revising my second-hand account on that basis I find that the only business of the Toledo Scale Company that showed a profit was the second-hand business. To express the situation in a better way would be to say that net salvage on the second-hand department would be $14,219.17, which represents the profit to that business.

753 WILLIAM A. ZOLG, recalled for further examination, testified as follows:

Direct examination.

By Mr. Meads:

"Q. Mr. Zolg, you have before you a book which you have designated as Customers' Ledger Accounts, which are a bound volume of

loose sheets, being carbon copies I believe of the original orders, is that correct?

"A. Yes, sir.

"Q. Would you explain to the Court the method adopted by your company or followed by your company in entering commissions on these various slips or sheets?

"A. You mean the method of which the commissions were put on the general books?

"Q. Yes.

"Mr. Zane: That's not what you asked him.

"Mr. Meads: It will result in the same thing.

"A. Well when the billing comes from the Order Department to the Accounting Department and the billing indicates that the scale has not been delivered, that is it is to be delivered later, then the first entry which in this particular case was made on December 31, 1910, on Voucher No. 18105 is simply the commission entry charging the Commission Account with the amount of commission shown on this billing and crediting the salesman with it.

"Q. Well, on the ledger account where is your notation made?

"A. In the center of the sheet. The Voucher number is put on the center of the sheet.

"Q. By ledger account I mean the customers' ledger account.

"A. The voucher number is put in the center of the sheet.

"Q. In what form is it, a stamp?

"A. It is a countersign showing the stamp; it puts the number on the sheet and on the voucher itself.

"Q. In the example before you in the A. F. Barnes order there appears the stencilled stamp print "Dec. 31, 1910" and underneath evidently made by a numbering machine "18105." Now what is "Dec. 31, 1910."

"A. That's the date on which the commission went through the books for this particular sale.

754 "Q. And what is the number "18105"?

"A. That's the number for that voucher on which the commission entry was made.

"Q. What determines the date or the year in which the sale is entered in your sales?

"A. The date of shipment or delivery up in the right hand corner of the same sheet.

"Q. In the item in question 1/24/11 is that the date?

"A. That's the date, January 24, 1911.

"Q. Under the column headed "Commission" at the extreme left hand of the page in question what is entered in the method followed by you?

"A. The commission is $52.50.

"Q. No, not in that particular instance. As a general practice what is entered, what is in that column?

"A. The commission and the date.

"Q. What do you mean by the commission, the amount?

"A. The amount of commission which the salesman has received on this particular sale.

"Q. And the date of what?

"A. The date the commission earned was put through, the date the salesman was credited with the commission.

"Mr. Zane: That appears on the ledger account.

"A. Yes.

"Mr. Meads:

"Q. That is the method followed by your company in that regard?

"A. Yes, sir.

"Q. You were present at Toledo during the time the examination was made there by the experts on behalf of the plaintiff, Marwick, Mitchell, Peat & Company?

"A. Yes, sir.

"Q. Did you at that time furnish them ledger accounts for the period embraced in this accounting?

"A. Yes, sir.

"Q. For six years and eight months, or whatever the period was.

"A. All the books, they had all the books there.

"Q. All the ledger accounts?

"A. All these customers' accounts.

"Mr. Meads: That's all.

755 Cross-examination.

By Mr. Zane:

"Q. When is the customer's sheet made out with reference to the date of shipment, is it made out at that particular time?

"A. No, sir.

"Q. When is it made out?

"A. After the order has been received by the Order Department and accepted by them.

"Q. So that somewhere on this sheet there will appear the date the order was accepted?

"A. Well, I don't know whether the date the order was accepted appears on that sheet or not. I could not say.

"Q. Look on this sheet that you have been examining, namely, Defendants' Exhibit 24, and tell me where you find there the date of the acceptance of the order?

"A. I don't know that that date appears on there (Examines Exhibit 24).

"Q. Does it appear on any of those customers' sheets?

"A. I don't know that it does.

"Q. When the order is accepted what if anything is entered on the books of the Toledo Computing Scale Company?

"A. So far as the acceptance of the order is concerned there is nothing entered on the books. After the order has been accepted it is simply billed by the Order Department and the billing is passed over to the Accounting Department for entry.

"Q. Well the first thing you did then after an order is accepted is to make out one of those pink sheets.
"A. Make out the entire billing.
"Q. Well, do you make out one of these billings sheets?
"A. Yes.
"Q. Then when the subject of the order is shipped you enter that date upon the pink sheet?
"A. When it is shipped, yes.
"Q. When the pink sheet is made out do you enter the amount of commission allowed?
"A. That's right on the sheet.
"Q. Yes. You did enter then on the sheet when it is first made out the commission allowed?
"A. I say that's right on the sheet at the time the billing is made up.
"Q. Oh, well, answer the question.

"(Question read.)

756 "A. Yes, sir.
"Q. What do you enter upon the books when you enter upon this sheet the commission allowed?
"A. The amount of the commission that is shown by this sheet.
"Q. On what account do you enter it.
"A. The commission account is charged and a salesman's account is credited.
"Q. What commission account do you mean? Have you more than one?
"A. Agents' commission account.
"Q. Have you more than one Agents' account?
"A. Agents' Commission and District Managers' Commission. There are two commission accounts and two expense accounts.
"Q. Have you an account of prospective commissions?
"A. Yes.
"Q. And have you an account of some other kind of commissions?
"A. That's under the agents' account. Yes, actual commissions and prospective commissions.
"Q. When you entered this commission on this pink sheet in which account do you enter the commissions on the books, the prospective commissions or the actual commissions?
"A. If the account is an open one it will be entered in the prospective commission account; if the account is closed it will be entered in the actual.
"Q. What do you mean by an open one?
"A. If the account remains open for some particular time.
"Q. What do you mean by remaining open?
"A. If the account remains open for the exchange scale or remains open for the note settlement.
"Q. When was this pink sheet first made out, what's the date?
"A. On the 27th of December.
"Q. Where do you find that date?
"A. Right here. (Indicating.)

"Q. Do you think that number there 12/21/27 is the date that sheet was made out?
"A. Yes, sir.
"Q. What is your year there.
"A. The year is not shown in here but it is shown here "12/19/10" (pointing to another place on the same sheet).
757 "Q. What is this which you have given as "12/21/27" what does 12 stand for?
"A. December.
"Q. What does 21 stand for?
"A. That's the day in December on which the order was received.
"Q. What does 27 stand for?
"A. That's the date in December on which it was billed.
"Q. What does the date in the corner, December 19, 1910, stand for?
"A. Order date.
"Q. That was the date of the order?
"A. That's the order date.
"Q. Does that mean the date of the acceptance of the order?
"A. That's the date of the order itself.
"Q. The date that is written on the order?
"A. Yes, sir.
"Q. Now, on that date of the 21st day of December, 1910, those pink sheets were made out?
"A. No, sir.
"Q. What date was it made out?
"A. The 27th of December.
"Q. On the 27th of December, 1910, then this pink sheet was made out?
"A. Yes, sir.
"Q. At that time and at that date there was entered on this pink sheet the amount of commission at $52.50?
"A. Yes, sir.
"Q. Upon the books of the Toledo Company, where was that $52.50 entered?
"A. I think it was entered on the journal?
"Q. What amount was entered on the journal?
"A. $52.50.
"Q. What was the account called?
"A. Agents' Commissions.
"Q. Prospective or which?
"A. Just Agents' Commissions. We don't distinguish between prospective and actual on that account.

"Mr. Meads: That's an expense account, is it not?
"A. Yes, sir.

'Mr. Zane:

"Q. Entered on an expense account $52.50?
"A. Yes, sir.
758 "Q. An expense then incurred according to the book?
"A. Yes, sir.

"Q. When did you first enter that $52.50 on the prospective commission account?

"A. It would not go into prospective commission on that particular account.

"Q. Answer my question.

"Mr. Meads: I respectfully submit he says it would not go into that account.

"A. On that A. F. Barnes account that commission would not go into prospective.

"Mr. Zane:

"Q. It never went into prospective at all?

"A. No, sir.

"Q. When did it go on the books into the actual commission account?

"A. December 31, 1910.

"Q. What does this mean above the commission in pencil, in your hand writing "P 34.30"?

"A. That is not my hand writing.

"Q. Is not that letter P in your hand writing?

"A. No, sir, it is not?

"Q. Do you know what it means?

"A. Yes, sir.

"Q. What does it mean?

"A. It means that commissions went into prospective later on when the account was put into the Doubtful and Suspense Division.

"Q. When after you have entered a commission in the actual commission account do you put it into the prospective commission account?

"A. If it goes into the Doubtful and Suspense.

"Q. Have you such an account as Doubtful and Suspense?

"A. No, sir.

"Q. Well, what do you mean, when it becomes a doubtful and suspendesl matter?

"A. When the account is handled by the Legal Department we call it doubtful and suspense.

"Q. That is, the account against the customer goes to the Legal Department?

"A. Instead of to the Collection Department, the Legal Department carrying on the correspondence with regard to the collection of the account.

"Q. Now find me on this book a page of the Customer's account where the commission went into the Protective Commission
759 account before it went into the actual Agent's Commission.

"A. (Witness turns to another account in same book.)

"Q. Is this in regard to a cylinder scale?

"A. No, sir.

"Q. Find a cylinder scale.

"A. (Witness turns to another account in the same book.)

"Q. This sheet which you have shown me is a sale of one cylinder scale, style No. 851, blue finish, factory No. 106,915?
"A. Yes, sir.
"Q. The selling price of that scale was what?
"A. $140.
"Q. How much?
"A. $140.
"Q. And to whom was it sold?
"A. E. L. Barlett.
"Q. Sandusky, Ohio?
"A. No, Fostoria, Ohio, Sandusky Street.
"Q. Now the commission allowed was $22.50?
"A. That's the net commission, the gross commission is $34.50.
"Q. Where does the gross commission appear?
"A. At the bottom of the sheet.
"Q. Well, what was the commission allowed on the sale?
"A. $34.50.
"Q. Why was $22.50 put under the head of commission?
"A. Because there was an excess on the amount of the allowance.
"Q. Allowance for what?
"A. For a 110 Dayton.
"Q. And what was the excess?
"A. $12.00.
"Q. So that the $12.00 was taken from the agent, charged to him, was it?
"A. It was taken out of the commission, yes, sir.
"Q. Now, did you enter the $34.50 anywhere on your books?
"A. Yes, sir.
"Q. Where was that entered in the commission, charged to the agents' commission, in the actual agents' commission?
760 "A. No, it was not charged to the agents' commission account, it is an expense account.
"Q. Now, are you talking about prospective, or what?
"A. I am just talking about commissions now, just agents' commissions.
"Q. Yes. How does that differ from the prospective commission account?
"A. The prospective commission account is an account simply carried with the agent. It does not enter into the expense account at all, it is a settlement account with the agent.
"Q. Is it entered upon your ledger, that account, is it on your ledger?
"A. We have a prospective account, a controlling figure, yes.
"Q. Well, let us see it on your ledger.
"A. (Witness turns to prospective commissions account.)
"Q. Now, this prospective commission account is carried by monthly balances, is it?
"A. Yes, sir?
"Q. And those monthly balances are taken from the combination journal.
"A. The entries are taken from the combination journal, yes.

"Q. Now, show me what you call the actual agents' commission account, what you call that.

"A. (Witness turns to Agents' Ledger Account.)

"Q. That is called at the head of the account Agents' Ledger?

"A. Yes, sir.

"Q. Does it represent anything else than commission?

"A. Yes, sir.

"Q. What else?

"A. Everything that enters into a salesman's account that is actual.

"Q. Show me the commission account.

"A. The agents' commission account?

"Q. Yes.

"A. Well, this is the agent's ledger, that contains the commission accounts that are actual.

"Q. Now, you knew very well on page 220 there was an agents' commission account, didn't you?

"A. It takes both prospective and actual.

761 "Q. Now, your prospective account is called prospective commissions on your ledger?

"A. Yes.

"Q. You have another account on page 220 of this ledger called Agents' Commissions?

"A. Yes, sir.

"Q. What is the difference between the two?

"A. Agents' Commissions Account there is an expense account and carried all the commissions regardless of whether they are prospective or actual.

"Q. Then all the prospective commission account is found in the Agents' Commissions Account?

"A. Yes, sir.

"Q. Now, the first entry on this Barlett sale where the amount was $22.50 commission with a total commission of $34.50 with an excess allowance of $12.00 charged against the agent, where did you enter the figure "22.50," under what account at the time you made the pink sheet out?

"A. It was entered under Prospective, a credit to the agent, but the charge was entered against Agents' Commission Account.

"Q. Where did you enter the figure $34.50"?

"A. Under Agents' Commissions.

"Q. Then the whole amount, $34.50, was entered under the Agents' Commission Account on the Combination Journal?

"A. Yes, sir.

"Q. Where did you enter the $12.00?

"A. That was credited to the Exchange Scale Allowance Account.

"Q. So that according to your book when you made out this pink sheet for the sale to Mr. Barlett you entered upon your book in the Agents' Commissions Account a total of $34.50?

"A. Yes, sir.

"Q. And that was entered there as a liability of the company, that was an expense, a liability?

"A. Yes, sir.

"Q. So that your Agents' Commissions Account contains all the commission whether actual or prospective?

"A. Yes, sir.

"Q. Now, when you made out this pink sheet did you charge that $12.00 to the agent?

762 "A. The result was the same as charging it to him. He was only credited with $22.50.

"Q. So that on his account he only got a credit for $22.50?

"A. Yes, sir.

"Q. So there would be a discrepancy between the Agents' Commissions Account and the Agents' Balances for that item at least of $12.00?

"A. Because $12.00 was carried in the Exchange Scale credits.

"Q. There would be that discrepancy?

"A. Yes, sir, there would be.

"Q. And that $12.00 would be balanced by $12.00 in the Exchange Scale Account credits?

"A. Yes, sir.

"Q. So that in that Agents' Commissions Account there would be $12.00 more than the liability that the company incurred to the agent?

"A. There would be $12.00 more charged to the Agents' Commissions Account because the agent saw fit to give away $12.00 of his commission.

"Q. Exactly, so there would be then a liability to the agent of $22.50——

"A. Net.

"Q. — But entered in the Agents' Commissions Account was $34.50, that's the fact, is it not?

"A. Yes, sir.

"Q. So that I say the Agents' Commissions Account on that particular transaction would be $12.00 more than the actual liability to the agent?

"A. Yes, that account would contain $12.00 more.

"Q. Now, when you transferred a suspended commission to the Prospective Commission Account did you make any entry on the Agents' Commissions Account?

"A. No, sir.

"Q. Now, I draw your attention to the annual statement for the twelve months ending December 30, 1911. On the second page of that statement you have the entry "Agents' Prospective Commissions," that was the balance taken off of your Agents' Prospective Commissions Account?

"A. Yes, sir.

"Q. And that's under the head of Liabilities of the Company?

"A. Yes, sir.

763 "Q. You had another Agents' Credit Balances $30,437.71?

"A. Yes, sir.

"Q. And those two together represented, according to this annual statement, the total liabilities of the Company to agents for commissions?

"A. Yes, sir.
"Q. The Agents' credit balances, $30,437.71, was an account made up of taking from the books all the credit balances due to agents?
"A. Yes, sir.
"Q. I draw your attention now to the account filed by the defendant in this action. You show the total of commissions from March 8, 1911, to the end of the year, $81,617.17?
"A. Yes, sir.
"Q. That is a pro-rated figure, is it not?
"A. No, sir.
"Q. What?
"A. No, sir.
"Q. Where do you get that figure?
"A. From these customers' sheets.
"Q. Taken from the commissions allowed on the customers' sheets?
"A. Yes, sir.
"Q. Whether the commission had gone into Prospective or Agents' Commissions Account?
"A. Yes, sir.
"Q. It didn't make any difference?
"A. No, sir.
"Q. Now, as to Defendant's Exhibit 24 you have already answered that no part of the commission, $52.50, went into any Prospective Commission Account?
"A. Yes, sir.
"Q. That all was then credited to the agent?
"A. Actual.
"Q. Actual?
"A. Yes.
"Q. Credited to the Agent?
"A. Yes, sir.
"Q. Was the total amount of the purchase price of this scale paid?
"A. Yes, sir.
"Q. Every cent of it?
"A. Yes, sir.
764 "Q. Now, why do you put through your books the commission before you put through the sale?
"A. I can't give you any reason for it. That's always been the method and has never been changed. It was the method in vogue when I went there, to put them through that way, and it has never been changed.
"Q. Now, will you find me one of these pink sheets where the total amount of the purchase price of the sale was not paid?
"A. (Witness turns to another page in Customers' Ledger Accounts.)
"Q. Now, this pink sheet that you have shown me represents a sale to G. Bariteau, Montreal, Canada, of one Cylinder Scale, Style No. 383, blue finish, Factory No. 96119, at a selling price of what?
"A. $195.00.
"Q. $195.00. Now, what was the commission allowed upon that sale to the agent, the total commission allowed?

"A. $36.25 to the agent.

"Q. $36.25. Now, was there anything deduction from that allowance to the agent on account of an excess allowance on account of an Exchange Scale?

"A. Yes, $500.

"Q. So that the net commission allowed to him was $31.25?

"A. Yes, sir.

"Q. And that's entered in the pink sheet under the heading of Commissions?

"A. Yes, sir.

"Q. What is meant by the figure below that "C. H. C. 29.00"?

"A. That's the commission to C. H. Collins.

"Q. $29.00 to Collins and the rest of the commission went to the other persons named here as an agent?

"A. Yes, sir.

"Q. Now, this pink sheet to Bariteau was made out on the 23rd day of August, 1912?

"A. Yes, sir.

"Q. The shipment was made on what day?

"A. September 13, 1912.

"Q. September 13, 1912. This sale was cancelled on April what?

"A. April 18, 1913.

"Q. April 18, 1913. $55.00 of the 195.00 was represented by $55.00 for an Exchange Scale?

765 "A. Yes, sir.

"Q. That allowance for the Exchange Scale was, however, $5.00 too much?

"A. Yes, sir.

"Q. So that that $5.00 was credited to Exchange Scale Account, was it?

"A. Yes, sir.

"Q. Then the difference between the selling price, $195.00, and the $55.00 allowance, $140.00, was represented by cash and notes.

"A. Yes, sir.

"Q. Now, how much of the cash and notes was paid?

"A. $54.00.

"Q. And that left as unpaid purchase price how much?

"A. $86.00.

"Q. 86.00?

"A. Yes.

"Q. Now, when the sale was cancelled can you tell from this pink sheet whether you got the scale back?

"A. No, sir.

"Q. You don't know anything about that?

"A. No, sir.

"Q. Well, when the sale was cancelled you reformed the commission allowed, didn't you?

"A. Well, that particular sale you are now speaking of has a notation here that a transfer order was received.

"Q. That a transfer order was received.

"A. Yes.

"Q. What do you mean by that?

"A. A new order was received transferring that scale.

"Q. A new order was received so this scale was sold right over to a third party, that's what you mean, is it not?

"A. Probably. It may have been sold to another party or probably to that same party or a new order taken from that same party and the terms extended. I don't know what it says here. In that particular case the order came from another paryt. (Witness examined account before finishing his answer.)

"Q. Now, go back and answer my question. When this sale was cancelled you reformed the commission allowed?

"A. On the amount paid, yes.

766 "Q. Just answer it, yes or no*t*. You did reform the commission allowed?

"A. Yes, sir.

"Q. And you only paid commission on the amount of cash received on the sale?

"A. Yes, sir.

"Q. So that the $31.25 commission allowed was reduced to $19.18?

"A. Yes, sir.

"Q. Now, when you reduced that to $19.18 where did you credit the difference between that and the original commission allowed?

"A. To the account called Agent's Commissions Account if the sale was absolutely canceled; if it was simply a transfer of commissions from the account to the account of L. Cote from whom the transfer order was received, then there would be nothing go through the Commission Account whatever.

"Q. Supposing now that this is a transfer and a new sale made to somebody else of that scale?

"A. The commission would then be credited through that Agent's Commission Account.

"Q. Yes, the Agent's Commission Account would receive the credit?

"A. Yes, sir.

"Q. Of the difference between $31.25 and $19.18?

"A. Yes, sir.

"Q. So that the amount of commissions allowed entered upon these pink sheets is no criterion of the amount of commissions thereafter paid?

"A. If the sale is cancelled, no.

"Q. Well, the total then of them, where there are sales cancelled and sales that do not go through, the total of the commissions allowed is not the proper criterion of the amount of commissions paid, is it?

"A. Well, the commissions shown on the pink sheets are the commissions that are allowed, if the sale is paid up in full; naturally if the sale is cancelled, the commissions that are allowed are allowed only on the amount paid.

"Mr. Zane (to the reporter): I wish you would mark by the plaintiff's exhibit number the sheet showing the sale to Bariteau.

"(Said pink sheet showing sale to G. Bariteau marked for identification Plaintiff's Exhibit 53.)

767 "Q. Now, this pink sheet representing the sale to G. Bariteau has been marked Plaintiff's Exhibit 53. The date of that shipment is September 13, 1913. You have already answered that?

"A. Yes, sir.

"Q. And it was shipped from Toledo, was it?

"A. No, sir.

"Mr. Meads: I think I will have to object. This of course is not cross examination or does not relate at all to anything I asked on direct, and I object for another reason. It must be obvious that this one about which he is examining the witness has nothing to do with this case because it is beyond the accounting period. This is in September, 1912, and we end in August, 1912.

"The Master: That's being used as an illustration as I understand it.

"Mr. Zane: Please mark the sheet which I indicate here Plaintiff's Exhibit 54.

"(Said pink sheet showing sale to Adelard Baril marked for identification Plaintiff's Exhibit 54.)

"Q. Now, on this sheet, Plaintiff's Exhibt 53, when was the commission allowed and entered on the book?

"A. August 26, 1912.

"Q. Well, that was within the accounting period, was it not?

"A. I guess it was.

"Q. What?

"A. I presume it was, yes.

"Q. That commission went into the Expense Account, didn't it, before the end of the accounting period?

"A. It went in August 26, 1912.

"Q. Yes, and so at the end of the accounting period you have us charged with the expense of a sale that was made after the accounting period, have you not?

"A. Well, not on that particular sale.

"Q. What?

"A. Not on that particular sale.

"Q. Didn't you have the expense entered?

"A. Yes, sir.

"Q. On the books?

"A. Yes, sir.

"Q. In August, 1912?

"A. Yes, sir.

"Mr. Meads: But not on that sale.

768 "Mr. Zane:

"Q. And the sale was not made until September, 1912?
"A. That's right.

"Mr. Meads: But not on that particular sale.

"Mr. Zane:

"Q. Why not?
"A. Because that's a Canadian sale.

"Mr. Meads: That's a Canadian sale. You are not charged with it at all.

"Mr. Zane:

"Q. Where was this pink sheet made out, in regard to Plaintiff's Exhibit 53?
"A. Toledo.
"Q. The expense of that was borne by the Toledo office, was it not?

"Mr. Meads: The expense of making it out?

"A. Yes.

"Mr. Meads: You are talking about commission now.

"Mr. Zane:

"Q. To make out the invoice, that expense was borne in the Toledo office, was it not?
"A. It went in with the rest of the billing.

"Mr. Meads: Do you mean to have the court infer that that is the same thing as commission, the expense of making out that piece of paper is identical with commission?
"Mr. Zane: We are talking about expense.
"Q. Now, we will turn to Plaintiff's Exhibit 54. There is a sale to Adelard Baril, Edmonton, Alberta, is there not?
"A. Yes, sir.
"Q. That's a pink sheet?
"A. Yes, sir.
"Q. It is made out at Toledo, is it not, in the Toledo office?
"A. Yes, sir.
"Q. The selling price of the scale is $165?
"A. Yes, sir.
"Q. $15.00 was paid in cash and the rest was paid by giving notes?
"A. Yes, sir.
"Q. The order was accepted when?
"A. I don't know.
"Q. Have not you got a date there?

"A. Got an order date, yes, but I don't know the date it was accepted.

"Q. What is your order date?

"A. November 18, 1911.

"Q. The shipment was made November 18, 1911?

769 "A. Delivered on November 18, 1911.

"Q. Yes. What does the date "December 1st" mean?

"A. The date it was received.

"Q. What was received?

"A. The order.

"Q. "6" is what date?

"A. The date it was billed.

"Q. Well then, that's the date it was accepted, was it not?

"A. I don't know.

"Q. I thought you said awhile ago they were billed as soon as the order was accepted?

"A. I said they were billed after the order was accepted. It may have been accepted on the 3rd or 4th or may have been accepted on the 1st, I don't know. They are billed soon after the order is accepted.

"Q. But the order was received at Toledo and accepted there?

"A. Yes, sir.

"Q. What is the Factory Number on this scale?

"A. 81756.

"Mr. Zane: Now, if your Honor please, we offer in evidence Plaintiff's Exhibit 53 and 54 for identification and ask to have them copied into the record out of this book.

"These places are marked in the book, and this item (referring to a pink sheet relating to a sale to S. Bardwell) I will ask the reporter to mark Plaintiff's Exhibit 55.

"(Said pink sheet relating to sale to S. Bardwell marked for identification Plaintiff's Exhibit 55.)

"Mr. Meads: To which offer defendant's counsel object, the objection to Exhibit 53 being that it is upon a transaction under date of September 13, 1912, which was beyond the time limited in the accounting in this case and that the transaction was also one in the Dominion of Canada which is not involved in this case, both of which objections I urge as against the introduction of Exhibit 53.

"The Master: Objection overruled.

"(Said pink sheet relating to a sale to G. Bariteau, heretofore marked for identification Plaintiff's Exhibit 53, so offered, received in evidence, marked "Admitted" and is in the words and figures following:)

Order Rec'd from L. Cote S. 4/10 D. & S. 3-5/13.*

Toledo Computing Scale Co., Toledo, Ohio, U. S. A.

Bills Receivable Register.

61—339

Order Dated 8/16/12.
Dun —. Bradstreet, —. 8/22/23.
Sold to G. Bariteau, at 56 Fullum St., Montreal, Que., Hockelaga County. When to Ship, at Once. Date Shipped [Sept. 13-12.]*
Sales Agent- J. P. Tremblay, C. H. Collins.
Collect Through Merchants Bank, East End Branch. Frt. Pjd. From ——, Via Windsor Factory. $10 Cash, 55 allow- for No. 346 Blue, Toledo, No. 11741 Can. No. 3588. 45441. Order No. 1.
Commission, ——.
Terms (B. C. B. Toledo). 130 Installment Note.
[O.]*

Quantity.	Style.	Finish.	Factory No.	Special.		Amount.
1	383	Blue	96119	Chart C, 8/22	Toledo Computing Scale.....	195.00
					Cr. by Cash & Note.....	140.00
					Bal. due.....	55.00

[Prost.]* JPT 31-25, 1918. C HC. 29.00. [17.22.]* 3—In stand gratis. Cancelled Apr. 18, 1913. Per —— ——.
Cr. by Ex. Scale Sep. 11, 1912. Cancelled April 18, 1913. Per —— ——. [Windsor Factory.]*

[19.18.]*
[17.20 C/B.]*

Note Record.

	Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
	1N	10	28	12	11.00	Nov. 8, 1912
	....	11	..	..	11 00	Nov. 30, 1912
	....	12	28	12	11 00	Dec. 30, 1912
Dr. JPT EX.	....	1	28	13	11 00	Feb. 1, 1913
5.00 [53-B]*		2	28	13	11 00	
		3	28	13	11 00	
Cr. 36.25						

Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
....	4	28	13	11 00	
....	5	..	..	11 00	
....	6	..	..	11 00	
....	7	..	..	11 00	
....	8	..	..	11 00	
....	9	28	13	9 00	

[For Iden. Pl. Ex. 53 admitted.]*
14—69. Checked by —— —— Sep. 30, 1912 [G. L.]* Sales Memo.

*Insertions in Pencil (printed in black-faced type) appear on our record.

771 Mr. Meads: As to Exhibit 54 I object on behalf of the defendant on the ground that the transaction was one in the Dominion of Canada and not involved in the accounting in this case.

The Master: Objection overruled.

(Said pink sheet relating to a sale to Adelard Barill heretofore marked for identification Plaintiff's Exhibit 54, so offered, received in evidence and marked "Admitted" and is in the words and figures following:)

772 **Toledo Computing Scale Co., Toledo, Ohio, U. S. A.**

Bills Receivable Register.

Order Dated 11/18/11. Dun —. Bradstreet —. 12/1/6. Date, 11/18/11.
Collect Through Canadian Bank of Commerce.
Sold to Adelard Baril, at 625 Namayo Ave., Edmonton, Atla. Sales Agent-, J. A. Scott, C. H. Collins.
Via (F. O. B. Toledo) Del. by Agt. When to ship —— —, ——. Order No. 1.
Commission, —. Terms $15 Cash, bal. monthly payments secured by note.
[O. K. as corr. and with insertions.]*

Dec. 8, 1911.	Quantity.	Style.	Finish.	Factory No.	Special.		Amount.
JAS. 57 50 CHC. 16 50	1	381	Blue	81756	Chart C, 12/1	Toledo Computing Scale.....	165 00
						Cr. by cash & note.....	165 00
							.....

Note Record.

Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.	Numbers.	[Date due.]* Month.	Day.	Year.	Amount.	Date paid.
3N	Dec.	18	11	15 00	Dec. 26, 1911	....	May	18	12	15 00	Jun. 5, 1912
....	Jan.	18	12	15 00	Jan. 30, 1912	....	Jun.	18	12	15 00	Jun. 25, 1912
....	Feb.	18	12	15 00	Feb. 24, 1912	....	Jul.	18	12	15 00	Jul. 25, 1912
....	Mar.	18	12	15 00	Mar. 27, 1912	....	Aug.	18	12	15 00	Sep. 30, 1912
....	Apr.	18	12	15 00	Apr. 30, 1912	....	Sep.	18	12	15 00	Oct. 7, 1912

Please advise factory number.

Checked by B. K. Dec. 8, 1911. Sales Memo. 31—23.

[For Iden. Pl. Ex. 54. Admitted.]*

*Insertions in Pencil (printed in black-faced type) appear on our record.

773 The Master: There is a controversy as to whether or not Canadian business is involved in this accounting. I have admitted evidence all the way through on that business and reserved the final determination of the question as to whether it is material.

Mr. Meads: Well, I want to save the objection if the Master please.

The Master: Yes.

Mr. Meads: And as to the Exhibit 55 I object on behalf of the defendant on the ground that the transaction is one in the Dominion of Canada and not involved in the accounting in this case.

The Master: Objection overruled.

(Said pink sheet relating to a sale to S. Bardwell, heretofore marked for identification Plaintiff's Exhibit 55, so offered, received in evidence marked "Admitted," and is in the words and figures following:)

[D. & S. 2/15/12.]*

Toledo Computing Scale Co., Toledo, Ohio, U. S. A.

Bills Receivable Register.

Order Dated 7/20/11. 8-3-5.

Dun —. Bradstreet —. Sold to S. Bardwell, at 75 Lang St., at Cobalt, Ont., Nippissing Co. When to Ship, —— —, —. Date† (Shipped). Aug. 5-11. Sales Agent-, J. Tobinson, C. H. Collins. Order No. —. E. M.

Collect Through Imperial Bk. of Canada †(Cobalt, Ont.).

Via (F. O. B. Toledo.) Del. by agent.

Commission, —. Terms $5 00 Cash—Balance monthly payments secured by note.

[O. K. as corr. and with insertions.]*

	Quantity.	Style.	Finish.	Factory No.	Sepcial.		Amount.
JR. 8 75. [Prosp. 5.00]* CHE. 1 75. [Prosp. 100]* Aug. 5. 1911. Jun. 6. 1913.	1	109	Blue	81115	Chart A, 8-3	Toledo Computing Scale.....	35 00
						Cr. by Cash & Note.....	35 00
							.....

Note Record.

Numbers.	Date due. Month.	Day.	Year.	Amount.	[30.]* Date paid.	Numbers.	Date due. Month.	Day.	Year.	Amount.	Date paid.
1N [53 A]*	Sep.	1	11	5 00	Aug. 23, 1911						
	Oct.	1	11	5 00	Sep. 22, 1911						
	Nov.	1	11	5 00	Oct. 14, 1912						
	Dec.	1	11	5 00	Oct. 14, 1912 [70 10-14-12]*						
	Jan.	1	12	5 00	[4—]* [30 6- 6-13]*						
	Feb.	1	12	5 00	Jun. 6, 1913						

Checked by B. R. Aug. 5, 1911. Sales Memo. 20—09.

[For Iden. Pl. Ex. 55. Admitted.]*

*Insertions in Pencil (printed in black-faced type) appear on our record.

†Matter in parenthesis stricken out in original.

775 Redirect examination,

By Mr. Meads:

"Q. Mr. Zolg, in answer to a question put to you by counsel for the plaintiff in which you were interrogated as to the credits involved in the order in which an excess allowance of $12.00 had been made counsel put to you the question that there was a discrepancy then in the commission between them, amounting as originally entered, of $34.50 to the extent of $12.00.

"Mr. Zane: If that's a statement, we object to it I never said anything of the kind. He didn't understand it.

"The Master: Wait until the question is completed.

"Mr. Meads:

"Q. When you said there was discrepancy in answer to counsel's question did you mean there was a discrepancy or a difference?

"Mr. Zane: We object as leading.

"The Master: I will sustain the objection. I assume that what he meant must be determined by what he said.

"Mr. Meads: Not if he answered following counsel's interrogation "yes."

"The Master: He may explain what he meant by the word "Discrepancy."

"Mr. Meads: Very well.

"The Master: If that word was used.

"Mr. Meads:

"Q. What did you mean in answer to the question in which the counsel used the word "discrepancy"?

"A. I meant that there was a difference of $12.00 between the amount shown on the account known on the general ledger as Agents' Commissions and the account known as Agents' Ledger. There was a difference there of $12.00.

"Q. On the debit side of your book somewhere in the transaction in question there was an entry of $34.50, was there not?

"A. On the Agents' Commissions Account, yes, there was a charge of $34.50.

"Q. Now, to offset that entry on the debit side of your ledger what were the entries on the credit side?

"A. There was $22.50 credited to the Agents' Ledger Account.

"Q. Yes.

"A. And $12.00 to Exchange Scale Account.

"Q. So there was no discrepancy in your book?

776 "A. Not in the book, no.

"Mr. Zane: We object. That's not where the trouble is.

"The Master: It may stand. There is not very much difference between a discrepancy and a difference. I think we all understand it.

"Mr. Meads: If the court understands it, that's all that's necessary.
"Mr. Zane: My question was directed to the Agents' Commissions Account being $12.00 too much.

"Mr. Meads:

"Q. In view of what counsel has just stated, Mr. Zolg, that the Agents' Commissions Account was $12.00 too much, on that particular transaction was the Agents' Commissions Account $12.00 too much?
"A. No, sir, it was not.
"Q. Why?
"A. Because the agent had a credit of $34.50 for making that sale, but of that credit he gave the customer $12.00 and we of course had to give that to the customer when he took his scale, but the commissions would be allowed $35.00 for that scale and we had to charge $37.50.
"Q. And you charged it to the agent by deducting that commission?
"A. Yes.

ARTHUR M. HANSEN, a witness called on behalf of the defendant, having been first duly sworn, testified as follows:

Direct examination.

By Mr. Meads:

"Q. What is your name?
"A. Arthur M. Hansen
"Q. Where do you live?
"A. 2451 North Kimball Avenue.
"Q. How old are you, Mr. Hansen?
"A. Thirty-one years.
"Q. What is your business?
"A. Accountant.
"Q. With whom are you associated?
"A. Price, Waterhouse & Company.
"Q. How long have you been associated with that firm?
"A. Practically about five years.
777 "Q. During that time have you had frequent occasions to investigate various books of account?
"A. I have.
"Q. Are you or were you in the employ of that company continuously during this time, these five years?
"A. Not continuously, no, sir.
"Q. Were you in the employ of that company in the month of September, 1916?
"A. Yes, sir.
"Q. Did you go to Toledo in the course of your employment at that time?
"A. I did, yes, sir.

"Q. And visit the plant of the Toledo Scale Company?
"A. Yes, sir.
"Q. How long did you remain there?
"A. I was there about a month.
"Q. And afterwards did you visit the plant of the Toledo Scale Company in Toledo?
"A. Yes, sir, early in December, 1916.
"Q. Have you made any investigation as to the cases in which during the months of November and December, 1910, commissions were entered on the books of the Toledo Company for sales which went through or were entered in the year 1911?
"A. I did, yes, sir.
"Q. Did you make any examination as to the cases in which commissions were entered in the year 1911 on sales which were entered in the books or which went through the books in the year 1912?
"A. November and December, 1911, yes, sir.
"Q. Approximately how many of those transactions did you investigate?
"A. Approximately about 5,200.
"Q. Tell what you did, just the method that you followed to determine those figures.
"A. Why, I analyzed the commissions in November and December of these years, 1910 and 1911, by taking the journal.
"Q. The first book you went to was the journal?
"A. The journal.
"Q. All right.
"A. And entered all commissions which went through in these months from the journal onto our schedule papers and after getting it on there, after having it on our schedule papers I went to the vouchers and referred to the vouchers to find whether
778 the commissions which went through in these years applied to Fan or Cylinder or Second-Hand Scales, and also with respect to the year in which the sale was entered upon the books.
"Q. Have you your working sheet before you on which you made your investigation?
"A. I have, yes, sir.
"Q. Will you please turn to these working sheets and state if you can the amount of commissions which were entered in the year 1910 in the months of November and December applicable to sales which were entered in the year 1911?

"Mr. Zane: For what kind of scales, all kinds.
"Mr. Meads: All kinds now.
"A. I find that the commissions which were entered in 1910 applicable to sales which were entered in 1911 amount to: on Fan Scales $2,733.37, on Cylinder Scales $9,034.61, on Second-Hand Scales $713.21.

"Q. Have you before you on your working sheets the amount of commissions which were entered in the year 1911 in the months

of November and December applicable to sales which went through the books in the year 1912?

"A. Yes, sir.

"Q. Please give these figures.

"A. The commissions entered in the months of November and December, 1911, applicable to sales which were entered in 1912 amount to, on Fan $3,074.93, Cylinder $4,749.49, and on second-hand $1,475.20.

"Q. What was the difference between the amount of commissions entered in the months of November and December, 1910, on Cylinder Scales which went through the books in 1911, and the amount of commissions entered in the year 1911, in the months of November and December upon Cylinder Scales which went through the books in the year 1912?

"A. The result of the difference, the difference resulting in a charge to 1911 commissions in respect to Cylinder Scales of $4,285.12.

"Q. That was an undercharge, was it not?

"A. It was an undercharge, yes, sir.

"Q. It charged to 1912 business an excess of that amount, did it not?

"A. Yes, sir.

"Mr. Zane: No, it would not.

"A. I would answer that question by saying that the re-
779 sult of my investigation was that the Cylinder Scales, the Commissions applicable to Cylinder Scales resulted to in an undercharge to the commissions of 1911 in respect to Cylinder Scales of $4,285.12.

"Q. So the Cylinder Scale business for that year would show a profit of how much too much?

"A. $4,285.12.

"Q. Have you made a list of the number of transactions in which there was this overlap?

"A. I have yes, sir.

"Q. By months?

"A. Yes, sir. I find that the overlapping items in November, 1911, that is to say, the items which were entered in November of 1911 which applied to sales going through, or November, 1910, which applied to sales going through in 1911 were 38 of such transactions.

"Q. How many between the Fan, Cylinder and Second-hand in December, 1910?

"A. There were 252 such transactions, the total number of transactions overlapping from 1910 into 1911 being 290.

"In November, 1911 the items overlapping into 1912 were 76, and in December, 1911, 257; the total items overlapping in these two months to 1912 being 333.

"Q. Now, as to this overlapping so far as it was applicable to Cylinder Scales, that were the number of transactions in the month of November, 1910, as applied to the 1911 business?

"A. There were 12 such transactions.

"Q. Now, how many of such transactions were there in the month of December, 1910, of Cylinder Scales applicable to the 1911 business?

"A. 129.

"Q. Now, recurring to the examination made in 1911, how many of such transactions were there in the month of November, 1911, applicable to the business for the year 1912 in Cylinder Scales?

"A. 23.

"Q. And how many of such transactions as last described in the month of December, 1911?

"A. 65.

"Mr. Meads: That's all.

780 Cross-examination.

By Mr. Zane:

"Q. When you went there in December, 1916, you went for the purpose of making the investigation as to which you have testified?

"A. Yes, sir.

"Q. How long were you there?

"A. About a week.

"Q. What date did you arrive?

"A. I don't recall the date. It was early in December, right in the first part of December, the 4th, 5th or 6th, somewhere around that date.

"Q. And what date did you leave?

"A. I don't recall the date at all. It was early in December, I was there a week.

"Q. You can easily enough tell the exact date, can't you?

"Mr. Meads: Why, yes, Mr. Hansen, just find out from your expense account.

"A. Yes, I can tell.

(Witness leaves room and returns a little later.)

"Mr. Zane:

"Q. Now, have you the answer, what date did you arrive?

"A. I arrived there on the 11th of December.

"Q. Did you start from here on the 11th?

"A. I started from here on the 10th.

"Q. And what time did you leave there?

"A. I left there early on the 17th at 1.30 on the 17th.

"Q. How many days' work did you actually put in there?

"A. I actually put in six days' work there, that is to say, I worked there six days.

"Q. You worked there on six days?

"A. Yes, sir.

"Q. And how many days did you charge for?

"A. I don't recall.

"Q. So you can't tell us how much actual time you put in?
"A. I can tell, yes. If you had told me, I could have gotten it while I was up there, but I just found out the number of days I was there.
"Q. Yes.
"A. I will get the number of hours if you so desire.
"Q. Well, you didn't put in all the time while you were there at work on this account, did you?
"A. I did.
"Q. Now, let me see your working sheets.
"A. (Witness hands Mr. Zane package of papers.)
781 "Q. Which sheet is the one upon which you assembled your result?
"A. This one right here. (Indicating.)
"Q. Now, the first book you consulted in regard to this investigation was the combination journal?
"A. The combination journal, yes, sir.
"Q. You took the charges that were entered there under the head Commissions Account?
"A. Yes, sir.
"Q. And did you look on the combination journal at entries under any other account?
"A. No, sir.
"Q. You didn't look on the combination journal for any entries under prospective commissions?
"A. I did not.
"Q. Now, who told you to begin with the month of November, 1911?
"A. Mr. Seatree.
"Q. You paid no attention to any other month?
"A. December, November and December.
"Q. Besides November and December?
"A. I didn't, no, sir.
"Q. You didn't look to see the comparative number of transactions in other months?
"A. I didn't.
"Q. Did you try to ascertain whether commissions were charged in 1911 in any cases on sales which were entered and the scales shipped in 1910?
"A. No, sir.
"Q. You can't tell us anything in regard to those.
"A. No, I can't. I didn't do anything about that at all.
"Q. Your instructions simply were to look at the months of November and December, 1911, and what other months?
"A. November and December, 1910.
"Q. Now, which months did you begin on?
"A. November and December, 1910, if I recollect rightly.
"Q. And you found certain cases wherein commissions were charged in November and December, 1910, where the sales never went through, didn't you?
"A. I did.

"Q. Did you examine in the books and trace every commission you saw charged in 1910 to see the final disposition of it?

782 "A. In the books, in the journal, to see whether the entry, the sale actually west through the books in 1911 do you mean?

"Q. No. To see what became of the sale and what became of the commission.

"A. I traced the commissions which were entered in November and December, 1910, and allocated these commissions as to years, as to the year in which the sale went through.

"Q. But you did nothing more?

"A. That's all I did. Also with respect to whether it was Fan, Cylinder or Second-Hand Scales.

"Q. Yes, as between Fan, Cylinder and Second-Hand?

"A. Yes, sir.

"Q. Now, you have here upon your sheet the first heading for the 1911 Commissions Account the item 'Commissions charged in 1910 on scale*d* shipped in 1911'; that's your first entry on this sheet you have made up here?

"A. Yes, sir.

"Q. What did you first have written there instead of 'shipped,' you have written that over something?

"A. (Witness examines sheet.) I don't believe I can make that out.

"Q. Very well?

"A. I don't believe I can make that out.

"Q. So then you took the date of the sale as the date when the scale was shipped?

"A. Yes, sir.

"Q. Did you look to see at what date the sale was entered on the books?

"A. I accepted the date shipped as being the year in which the sale was entered upon the books.

"Q. Where did you find that date of shipment?

"A. Why, on the customers' accounts, either there or on the vouchers, one or the other.

"Q. The vouchers in regard to the commissions you mean?

"A. Yes, sir.

"Q. And wherever you saw a date of shipment you assumed that was the date of sale?

"A. That was the year in which the sale was entered on the books.

"Q. Your next item in this account is 'Commissions charged in 1910 and cancelled in 1911 on account of no sale'?

"A. Yes, sir.

"Q. Did you go beyond 1911?

783 "A. I don't quite get the question.

"Q. I say your statement is confined to cancellations in 1911. Didn't you go beyond 1911 to find cancellations?

"A. I traced the commissions entered in November and December, 1910, and those that I have entered there were the ones which were cancelled which were entered in November and December, 1910, and cancelled in 1911.

"Q. Yes, but in your search of the books for cancellations of sales did you find any cancellations of sales in regard to which commissions were charged in 1910 in the months of November and December that were cancelled later on?

"A. I believe I did find one or two instances like that.

"Q. Where are they?

"A. Well, I didn't enter them on that sheet. I have got them on my records here though if there are any along that line.

"Q. You didn't enter them on this sheet?

"A. I only entered things in there applicable to 1911.

"Q. Now, the other sheets of paper you have produced are your working papers?

"A. Yes, sir.

"Q. How many did you have working there with you?

"A. Why, I had one of our men, and oh, there were *were* about five or six of the company's men that did work in connection with it.

"Q. Who were those five or six of the company's men?

"A. I don't recall.

"Q. What work did they do?

"A. Looked up the customer's name in the Customers' Ledgers for us.

"Q. On these detail sheets are all the entries in your handwriting?

"A. No, sir.

"Q. In whose handwriting are they?

"A. Either mine or the assistant's I had working down there.

"Q. What was his name?

"A. I had Mr. Darrow for a time, and one of our Detroit men, and I can't recall the other man's name at present.

"Q. Did you verify each entry yourself?

"A. Did I verify each entry myself?

"Q. Yes.

"A. As to whether the commissions was applicable to or the year in which it was applicable.

784 "Q. No, verify the entry with reference to the voucher.

"A. No, I don't think I did all that.

"Q. Did your assistant?

"A. Yes, sir.

"Q. Now, the second working sheet that's been produced here for November and December, 1910, is entitled 'Summary of analysis of Commissions Account, debits only.'

"A. Yes, sir.

"Q. And you mean by that debits to the Commissions Account and this refers only to the debits?

"A. Only to the debits.

"Q. And you divided this sheet into Fan, Cylinder and Second-Hand and Rebuilt Scales?

"A. Yes, sir.

"Q. And you refer on the side to your detailed working sheets?

"A. Yes, sir.

"Q. Now, your ninth detailed working sheet for Cylinders has after it the notation '1909,' what does that notation mean?

"A. That means that the sale was passed in 1909.
"Q. That the sale was made in 1909?
"A. No, the sale was entered on the books in 1909, but did not go through until November or December, 1910.
"Q. And the commission was now going through in 1910?
"A. Yes, sir, one or two instances like that.
"Q. The instances are Cylinders $327.24 1909 on sheet 9 sheet 10 Cylinders $332.50, on sheet 14, 1909, $326.75, are they not?
"A. (Examines sheets.) On Cylinders there were three instances, $5.25, $1.50, and $11.25.
"Q. Your figures '1909' are placed after the total on that sheet, are they not?
"A. Opposite the 1909. I also show the amount of commission applicable to 1911, $5.25 in that instance.
"Q. And the amount of that commission applicable to 1911 you fix how?
"A. I don't get your question.
"Q. How do you fix the amount of commission applicable to 1911?
"A. I take it off of my sheet No. 9.
"Q. You found in this year 1910 a commission entered of a total on your sheet 9 of $327.24, didn't you?
785 "A. Yes, sir, that's 1910, commissions on certain sales which went through in 1910.
"Q. And you figure 1909 is after that?
"A. No, it is opposite the $5.25.
"Q. Yes, but it was after $327.24, is it not?
"A. It has not any relation to the $327.23.
"Q. Oh, yes. Is not it after that?

"Mr. Meads: He has answered the question. He says it has not.

"Mr. Zane:

"Q. Oh, answer my question.
"A. No, it has not, it is above it.
"Q. And not after it?
"A. No, sir.

"Mr. Zane: Mark this sheet for identification Plaintiff's Exhibit 56.

(Said sheet marked for identification Plaintiff's Exhibit 56.)

"Q. Now, when you turn to your working sheet where do you find any notation of the year 1909 opposite the $50?
"A. I don't find any, there is none intended to be after any $50.
"Q. Not intended to be?
"A. No, sir.
"Q. Now, your working sheet shows on sheet 10 that a commission of $1.50 was allowed on a sale to A. Rosenstein made in 1909 and a commission was allowed in 1911.
"A. If you will allow me to see the sheet.
"Q. The very top one.

"A. The commission was passed in November, 1910.
"Q. Yes.
"A. It was passed in November, 1910, on a sale which went through the books in 1909.
"Q. Exactly.
"A. Yes, sir.
"Q. Now, what was the commission entered on the books, the total commission?
"A. $1.50.
"Q. Just $1.50?
"A. You are talking about this particular transaction?
"Q. I am.
"A. Yes, sir, $1.50.
"Q. And that was an entry of a commission allowed on the books of $1.50?
786 "A. Yes, sir.
"Q. Did you ascertain what that commission was on, was it on a scale?
"A. Yes, sir. It might have been a revision. I don't recall just the circumstances under which the commission was allowed or passed on the books; no doubt it was on a scale.
"Q. Is that in your handwriting, that entry?
"A. No, sir.
"Q. Whose handwriting is it?
"A. I don't know.
"Q. You don't know?
"A. No sir.
"Q. Well, were any of these entries made by the clerks of the Toledo Scale Company?
"A. No, sir.
"Q. Well, if you don't know whose handwriting it is, how do you know that?
"A. It was either Mr. Darrow's or the other gentleman's that was on the work with me.
"Q. How do you know that?
"A. How do I know what?
"Q. That it was either one or the other of these gentlemen?
"A. It must have been because they were the only ones that entered anything on these sheets.
"Q. How do you know that if you don't know the handwriting?
"A. It is reasonable to assume if there was only three men writing on these sheets and it is not mine, it must have been one of the other two.
"Q. But have not you any means of knowing beyond what you said as to who made the entries upon these sheets?
"A. No.
"Q. Now, you think that on this sheet of yours the amount $5.25 opposite which is the year 1909 is the total commission allowed on some transaction or sale of a Cylinder Scale, do you?
"A. That was entered in either November or December, 1910, yes, sir.

"Q. And you say that is the total commission entered on that?
"A. No, I don't say that. I say that's the total commission that was entered in November or December, 1910.
"Q. You have no idea what the total commission was on the transaction?
787 "A. No, I can't tell you from my papers.
"Q. And similarly you would have answered as to the $1.50——
"A. Correct.
"Q. —opposite which you have marked 1909?
"A. Yes, sir.
"Q. In making your totals you did not add in the items marked 1909?
"A. No, sir."

Mr. Zane: Now, will you let me see that sheet of Instructions?
Mr. Meads: No. I will let the Master see it and he can see how obviously it has nothing to do with this.
Mr. Zane: No, that other sheet, under that.
Mr. Meads: I have no objection to the Master seeing them. (Hands paper to Master who examines same.)
Mr. Zane: Well, they were handed over to us.
Mr. Meads: They were handed over to you under a misapprehension. I told the witness to hand you his working papers and he handed you these as well.
Mr. Zane: Is that the instructions given to him in writing?
Mr. Meads: The Master can see. I have no objection to the Master seeing, but he handed it to him by mistake. He might have handed to you his pocket book. You would not have wanted to keep it, would you?

(Master hands papers back to Mr. Meads.)

Mr. Zane: The letter we don't care anything about, but the other, the instructions, are what we want.
The Master: I think they are entitled to see it, Mr. Meads.
Mr. Meads: Very well. (Hands papers to Mr. Zane.)

Mr. Zane:

Q. Now, you were instructed here to take the last two months of 1910 and the first two months of 1911, did you do that?
A. No, sir.
Q. You were instructed to take the last two months of 1910 and the first two months of 1912. Did you do that?
A. No, sir.
Q. Did you get any paper from Messrs. Reeves and Mould?
A. I did not.
Q. You obtained no document from Mr. Zolg?
788 A. I didn't obtain any, no. I had a trunk full of things packed up there and they came down with me at the same time I came to Chicago.

Mr. Meads: Are you through with this witness?

Mr. Zane: No.

The particular part I was referring to and drawing to Mr. Morse's attention was the fact that Mr. Bowman here admits that his estimate on Fan Scales was all wrong and that Mould and Reeves furnished him incorrect information, and he is now sent to Reeves and Mould to see if they would give him correct information.

Mr. Meads: That has nothing to do with this witness, has it?

Mr. Zane: Yes, it's a part of his instructions.

Mark this sheet of instructions Plaintiff's Exhibit 57.

(Said sheet of instructions marked for identification Plaintiff's Exhibit 57.)

"Q. Now, did you begin work on anything else than commissions?

"A. I didn't, no, sir.

"Q. What was this work on the allowances that you put in these sheets?

"A. Well, there was a little work done on the allowances, that didn't amount to very much, it was not anything.

"Q. Well, you started to do some work on the allowances?

"A. I didn't start, I did what I intended to do and finished it.

"Q. What was that for, that work on the allowances?

"A. Just listing allowances. We had gone through the Customers' Accounts and marked them indiscriminately. We had gone through the Customers' Accounts and marked them and we merely listed them on here for reference.

"Q. For what reference, for what purpose?

"A. For reference in case Mr. Meads might want to use that in connection with his conduct of the case. That's all I know about it.

"Q. What was your principle of selection, why did you select these particular things?

"A. I say that we went through there and just marked these allowances indiscriminately and listed them. Where—If you will allow me to see the sheet. (Examines sheet.) Where the allowances overlap in 1911, those were the ones that we listed.

"Q. Did you attempt to list them all?

789 "A. No, sir.

"Q. You just took a few?

"A. Just took a few, yes, sir.

"Q. (Reading:) "Allowances on scales sold in 1911 charged to Allowance Account in 1912."

"A. Correct.

"Q. (Reaing:) "Allowances on scales sold in 1910 charged to Allowance Account in 1911."

"A. Yes, sir.

"Q. Then you made a summary of that work, did you?

"A. Of what work?

"Q. This work on the allowances.

"A. This has nothing to do with the allowances, no, sir.

"Q. This summary sheet has nothing to do with that?
"A. No, sir.
"Q. What is this summary sheet I have just shown you?
"A. I have marked down there, if you will just allow me to have the sheet a minute. (Examines sheet.) It is a summary of the charges to the Commissions Account of November and December, 1910.
"Q. That is, the debits to that account?
"A. Yes, sir. I believe I have got the credit marked down there too.
"Q. Yes, and the credits to that account you put below and you took both the U. S. Sales and Canada?
"A. Yes, sir, that is, each of them, they are marked separate.
"Q. What do you mean by this phrase, "Posted to U. S. Commission Account in error instead of to U. S. Commission Account", what do you mean by that notation?
"A. The 1910 commissions were charged with the total of the U. S. and Canada commissions—just correct that please. The total of the commissions in December, 1910, were charged to the U. S. Commission Account in that month instead of charging $916.70 of the amount to Canadian Commission Account.
"Q. Have you any working sheets for this sheet?
"A. No.
"Q. These are totals taken off the book?
"A. Of the journal, yes sir.
"Q. Is this in your handwriting, this sheet I have shown you?
"A. Yes, sir.
"Q. You took this off the ledger, didn't you?
790 "A. No, sir.
"Q. Well, you didn't get these figures off the journal?
"A. I did.
"Q. Totalled?
"A. Yes, sir.
"Q. And the Canadian section in that same journal?
"A. Yes, sir.
"Q. Now, to go back to this work you did on the allowances, you have here on your different sheets entitled "Allowances on scales sold in 1911 charged to Allowance Account in 1912" five sheets, have you?
"A. Yes, sir.
"Q. Are those all the allowances that are to be thus characterized found on the books?
"A. No. As I said before, these items were taken off the books indiscriminately.
"Q. Now, you took a few items of allowances on scales sold in 1910, charged to Allowances in 1911?
"A. Yes, sir.
"Q. Why did you stop with so few?
"A. On account of the limited time at my disposal.
"Q. Now, after you found a commission in November or Decem-

ber, 1910, entered on the journal who ascertained for you the account or the voucher showing the date of sale, who did that?

"A. I did some of it myself.

"Q. Some of it was done by these men working for the Toledo Scale Company, was it?

"A. Some of it was done by myself and some of it was done by our Price, Waterhouse men that were down there, and I don't just recollect whether any of the Scale men did some of that work or not.

"Q. Well, tell us, when you looked at the journal you saw there a commission debited to the Commissions Account?

"A. I did, yes, sir.

"Q. What did you do first?

"A. Went to the journal, I mean went to the vouchers.

"Q. To the vouchers for the debit of that commission?

"A. That's right.

"Q. You found then a sheet showing the sale?

"A. Yes, sir.

"Q. Called the Customer's Ledger Accounts?

"A. In some instances we went to the Customers' Ledger Accounts.

791 "Q. But not all?

"A. Not all. Where I could get my information off of the voucher I took it off of the voucher.

"Q. The voucher was an exact duplicate of the Customer's account?

"A. That's right, in some instances, in most instances.

"Q. In some it was not?

"A. No, for instance, they would have revisions going through.

"Q. Revisions going through, and those were all marked on the customer's ledger account and not on the duplicate, is that what you mean?

"A. Where they put through a revision for commissions they put through a voucher for that revision. In those cases I would not find a duplicate customer's invoice.

"Q. Now, who found or how did you go to work after you had ascertained that the commission was allowed in 1910, in those two months upon a sale made in 1911, what effort did you then make in order to find whether or not that commission, that particular commisison, had ever been revised?

"A. I didn't do anything. I was not interested in it at all. I was analyzing the November and December commissions, 1910.

"Q. How did you happen then to find that some of those commissions had been cancelled?

"A. By referring to the sale.

"Q. That you found on the sale itself.

"A. Yes.

"Q. The customer's ledger account?

"A. The customer's ledger account, yes.

"Q. Now, you found in the journal in these months credits to the Commissions Account?

"A. Yes, sir.

"Q. What did you do in regard to them?

"A. Nothing.

"Q. Nothing at all?

"A. No, sir, confined myself to the debits all the way through on account of the lack of time that I had to do the work in.

"Q. And unless you found a mark in regard to a commission on the customer's ledger account that you looked at, you looked no further?

"A. I don't quite get that question.

"Q. (Question read.)

792 "A. I looked at the customer's ledger account and I would see the commission entered on the customer's account, and I would also reconcile it with the one that I was investigating and then of course make my entries as to the year in which the sale was entered.

"Q. Exactly, but if you saw nothing on that customer's ledger account indicating that that commission had been withdrawn or recalled or revised, you didn't look anywhere else to find whether that commission had been withdrawn, recalled or revised, did you?

"A. No, sir, As I say, I was analyzing the commissions which went through November and December, and I confined my investigating to those two months.

"Q. Now, the caption at the top of the assembly sheet is in your handwriting, is it?

"A. Yes.

"Q. And the words "Fan", "Cylinder" and "Second-Hand" at the top of the columns are in your handwriting?

"A. Yes, sir.

"Q. The words "Commissions charged in 1910 on scales shipped in 1911" are in your handwriting?

"A. Yes, sir.

"Q. And the words "Commissions charged in 1910 and cancelled in 1911 on account of no sale" are in your handwriting?

"A. Yes, sir.

"Q. Now, in whose handwriting is the next? (Showing witness sheet.)

"A. Mr. Seatree's.

"Q. Now, if I understand you, you do not know from any investigation you made whether the amount you have here for commissions charged in 1910 and cancelled in 1911 on account of no sale are all the commissions charged in 1910 that were cancelled in 1911, do you?

"A. No, sir, they are so far as the two items are concerned.

"Q. Well, how do you know they are all for the two months?

"A. Because I traced the commissions which went through in those two months.

"Q. You traced them to the Customers' Ledger?

"A. Yes, sir.

793 "Q. And if you found nothing on the Customers' Ledger you assumed that that commission was never cancelled?

"A. If they were cancelled later on in the year, of course I would not know, but as far as that point there is concerned, the commissions on which the sale was afterwards cancelled are the actual cancellations of the sales in respect to these commissions.

"Q. That are on the Customers' Ledgers?

"A. Yes, sir.

"Q. That are noted there?

"A. Yes, sir, these sales never went through.

"Q. That is, you mean no delivery took place?

"A. No delivery took place, no, sir.

"Q. Oh, they are not cases of sales that were canceled after a delivery had taken place?

"A. No, sir, these are cases where the sale had never taken place, delivery had never been made.

"Q. So you didn't keep any account of commissions that were cancelled on account of the sale being cancelled after delivery?

"A. After delivery, no, sir.

"Q. Now, the next part of this account, the figures are entered in red. Are those your figures also?

"They are.

"Q. And under the columns "Fan," "Cylinder," and "Second-Hand" you have commission charged in 1911 on scales shipped in 1912?

"A. Yes, sir.

"Q. And you have your next, "Commissions charged in 1911 and cancelled in 1912 on account of no sale," your answer as to those two items would be the same as you have made in regard to 1910 above?

"A. Yes, sir.

"Q. Now, the next handwriting there is in Mr. Seatree's handwriting, is it not?

"A. Yes, sir.

"Q. Did you find or attempt to find on the books commissions charged in any months of 1911 on sales made in 1910?

"A. Why, any commissions that went through in November or December, 1911, for which the sales went through in 1910 were indicated in my papers.

"Q. Those are not entered in these totals of course?

"A. Well, if they are none entered there, the probabilities are there are not any.

794 "Q. But I asked you the question, if you made any search for a commission entered on the books in 1911?

"A. Yes, sir.

"Q. In regard to a sale that was made in 1910?

"A. I did.

"Q. And what months?

"A. November and December, 1911.

"Q. November and December, 1911. You looked in those two months to find out whether there were any commissions charged there on sales actually made the year before, 1910, that's what you did, is it?

"A. No, I went through the commissions in November and December, 1911, and analyzed the commissions which went through in those two months with respect to the year in which the sale was entered.

"Q. Exactly.

"A. Yes, sir.

"Q. Now then, you didn't follow the instructions of Mr. Seatree to look at -he first two months in 1911 to see the commissions charged in the first two months of 1911 on sales that had been made in 1910, did you?

"A. No, I didn't for the reason——

"Q. I didn't ask you for the reason. I asked you if you did.

"A. No, I didn't.

"Q. On your 7th working sheet, debits, you have a case of commissions, two of them, opposite which the name of the customer is blank. Is it the same as the one above?

"A. No.

"Q. What is the matter there? You didn't find the customer's name?

"A. It was not necessary.

"Q. Well, did you find it?

"A. Yes.

"Q. You didn't enter it, however?

"A. Didn't find it necessary for the purposes of my examination. These entries are made there for convenience.

"Q. Well, at any rate, although you found the name of the customer, you didn't enter it there?

"A. I didn't enter it there, no, sir.

"Q. You have the amount of the commission in the next column, $27.50?

"A. Yes, sir.

795 "Q. Then in the next column under the heading "Fan, 1911" you have entered in red $10.00?

"A. Yes.

"Q. What does that mean?

"A. That means that there was a credit, 1911 was credited $10.00 on that transaction.

"Q. A credit for what?

"A. I don't recall the transaction now, but that was the reason of the entry I made an entry there crediting Fans commissions in 1910, $10.00, and charging Cylinders Commissions in 1911 $37.50.

"Q. Now, why did you do that?

"A. Because the transaction necessitated it. I don't recall the exact circumstances of the transaction without seeing the voucher.

"Q. Where did you get the amount $27.50 as the amount of the commission?

"A. From the journal.

"Q. That was the amount on the journal?

"A. Yes, sir.

"Q. Then your next item in red is $10.00?

"A. Yes, sir.

"Q. Did you find that on the journal?
"A. No, sir.
"Q. Where did you find that?
"A. On the voucher.
"Q. Then your next amount "Cylinders" you charge the sum of these two amounts $27.50 and the $10.00 in red, $17.50. Where do you get that?
"A. From the voucher.
"Q. You didn't get it from the books, from the journal?
"A. From the journal, I get $27.50 from the journal.
"Q. Was there any such sum as $37.50 on the journal?
"A. No, sir.
"Q. Your next entry upon this same detail working sheet is an entry under the amount of Commissions $33.25?
"A. Yes, sir.
"Q. Then you have in red under the year 1911 in the Fan column $35.00?
"A. Yes, sir.
"Q. Then you have added those two together and charged Cylinders with the total, $68.25?
"A. Yes, sir.
"Q. You got the $33.25 from the journal?
796 "A. I did.
"Q. The $35.00 you say you got from the voucher?
"A. Yes, sir.
"Q. The total, $68.25, is the figure you made up which does not exist on the books?
"A. Does not exist—It exists on the record, it was taken from the voucher.
"Q. It exists on the voucher but not on the journal?
"A. Not on the journal, just on the voucher, yes, sir.
"Q. Now, there are a number of these transactions of corrections in red on these working sheets, are there?
"A. Yes, sir, there are some, I don't know how many. I don't think you will find very many like that.
"Q. Now, referring to the summary of the sheets, of the detail sheets, the summary which contains the additions, the totals from which are carried into the final summary that I have asked you about, who made this sheet which is marked for identification Plaintiff's Exhibit 56?
"A. That was made by one Price, Waterhouse Company's men, just who it was I don't recall.
"You don't know which man?
"A. It was not Mr. Darrow and was not myself, it was the other man, it was a Detroit man, I don't recall his name.
"Mr. Meads: Would you know his name if you heard it?
"A. As a matter of fact, he was one of our Detroit office men.
"Mr. Meads: Was his name Staples?
"A. That's it, yes, Mr. Staples.

"Mr. Zane:

"Q. Will you show me the summary for these red figures, summary of the sheets? Is this it (handing witness paper)?

"A. Yes, sir.

"Q. Now, the working papers for that are these (referring to other papers)?

"Now, when you were making up your detailed sheets how did you tell whether the scale was a second-hand scale or a new scale?

"A. It was generally second-hand or rebuilt.

"Q. Well, did you have any other way than that?

"A. No.

"Q. On your detailed sheet for December, 1910, you have a commission under the head of Second-Hand Scales marked "Cylinder $42.50," a commission, do you see that?

"A. Yes.

797 "Q. How do you know that that was a second-hand scale?

"A. Because the voucher or the—I believe in this case it was the voucher, is marked second-hand.

"Q. Do you know what kind of a Cylinder Scale that was?

"A. No, I don't.

"Q. Well, you knew it was a Toledo Cylinder, didn't you?

"A. I knew it was a Cylinder Scale, yes.

"Q. But didn't you know it was a Toledo Cylinder?

"A. I didn't get the distinction.

"Q. When you marked Cylinder "Day" what do you mean?

"A. Dayton.

"Q. Yes. So you know those were Dayton Cylinders, those second-hand. Now, instead of marking it that, you marked it "Cyl."?

"A. I meant it was a Toledo Cylinder.

"Q. Why, of course. Now, that scale that's marked there "Cylinder $42.50 Commission," can you tell us the selling price of that scale?

"A. No, sir, not without referring to the voucher.

"Q. Well, you know that the price is over $125, don't you?

"A. I don't know anything about it.

"Q. You found that the great mass of Second-hand scales, Cylinders, sold were Dayton Scales, didn't you?

"A. A number of them, yes.

"Q. Well, the great mass of them were Dayton Scales?

"A. Well, I won't confine myself to say the great mass of them were because I don't know, I am not qualified to say.

"Q. You can tell by looking at your sheets, can't you?

"A. Oh, yes, I can tell by looking at the sheets.

"Q. Now, glance at those sheets and tell me if of the Cylinder Scales sold second-hand the great mass of them are not Dayton second-hand?

"A. Yes, I would say so.

"Q. And you make the same answer with regard to the month of November, 1911, would you not?

"A. This is in regard to December, 1910, this particular one, the one I just answered you.
"Q. That was December, 1910?
"A. Yes.
"Q. What are you looking at now?
"A. November, 1911.
"Q. November, 1911. How is it there?
798 "A. November, 1911, I would say the great mass of them were Daytons.
"Q. And in November, 1910, how is it?
"A. I would say most of them were Dayton sales, in November, 1910.

"Mr. Meads: Of the second-hand Cylinder Scales?
"A. Yes, of the second-hand Cylinder Scales.

"Mr. Zane:

"Q. What's that sheet which I show you in regard to (handing witness sheet)?
"A. I can't tell you.
"Q. Now, in this summary here, November and December, 1911, summary of analysis of Commission's Account, debits only, why didn't you run through your figures for 1911 on that sheet?
"A. Because of the lack of time in getting it up, I didn't have time to do it.
"Q. Getting it up from where?
"A. Summarizing it at the time. I did that in order to get through as fast as possible.
"Q. Where is the 1911 result summarized?
"Q. Where is it summarized?
"Q. Yes.
"A. Let's see. You will have to run through these sheets and take the totals off these sheets all the way through.
"Q. Didn't you have a summary somewhere?
"A. That's the summary. We didn't summarize in 1911.
"Q. You didn't summarize in 1911 at all?
"A. No, sir.

"Mr. Zane: Now, we offer Exhibit 57 in evidence.
"Mr. Meads: To which the defendant objects, if your Honor please, as not part of the cross examination. It is not material to the issues in this case.
"The Master: Do you object because it is offered on cross rather than when it comes to their direct?
"Mr. Meads: That's one reason, the order of its offer.
"The Master: Objection sustained on that ground.
"Mr. Zane: All right.

(Said Exhibit heretofore marked for identification Exhibit 57, so offered, but not received in evidence, marked offered but not admitted.)

799 Redirect examination.

By Mr. Meads:

Q. Mr. Hansen, in answer to a question put to you by counsel for the plaintiff in this case you were asked the question: Did you follow Mr. Seatree's instructions as to the examination for the first two months of 1911 to which you said no. You attempted to state why you did not do that. I ask you now why you didn't to that?

A. I didn't do it for the reason that the sales in most instances followed commissions and after I got down there I decided I would pick up most of these overlapping items by going into November and December, the months of November and December, and that in January and February there would be practically no items of commission which went through in those months applying to a prior period.

Q. That commissions which were entered in January and February would in almost all cases be swallowed up on the books during the year?

A. During the year, yes, sir.

Mr. Meads: If the Master please, I would like to withdraw Mr. Hansen now with the privilege of putting a few questions to him if these vouchers show up.

Mr. Zane: Let me ask a question before he goes.

Recross-examination.

By Mr. Zane:

"Q. Mr. Hansen, you would have looked for the commissions allowed in 1911 on sales made in 1910 in the first months of 1911, would you not?

"A. Why, as I say, the commissions——

"Q. Oh, answer the question.

"Mr. Meads: Go ahead and finish your answer.

"Mr. Zane: That can be answered yes or no.

(Question read.)

"A. By going into the commissions in January and February 1911, I might have located such commissions, if there were any, yes, sir.

"Mr. Zane: I move to strike out his answer.

"The Master: It may be stricken out.

"Mr. Zane: What is your answer, yes or no?

"Mr. Meads: If you are not able to answer yes or no, Mr. Witness, you may say so.

"A. I can't answer that question by yes or no.

"Mr. Zane:

"Q. Did you refer, when you went down there or before
800 you went down there, to the working papers that had already been made by Price, Waterhouse & Company?
"A. I did not, no sir.
"Q. So you didn't see that in the first three months of the year 1911 they had marked on their working papers every case of a sale made in 1910 where the commission was allowed in 1911?

"Mr. Meads: I object to that question. The witness has already answered he did not see their papers.
"Mr. Zane: This is further testing him.
"Mr. Meads: I object, if the Master please, the witness has already answered he didn't see the papers.
"The Master: Objection sustained.

"Mr. Zane:

"Q. Were you in Toledo at the time of the first examination?
"A. I was.
"Q. You took part in that, didn't you?
"A. I did.
"Q. Did you know that on the working papers of Price, Waterhouse & Company in the first three months of 1911, they had marked with the figures "1910" or before that as the case might be for the date of sale where the commission was allowed in 1911 on a sale made in 1910, or earlier?
"A. I did not, no, sir.
"Q. So you didn't refer to their former working papers at all?
"A. I had no occasion to.
"Q. And that means you did not refer to them?
"A. I did not refer to them, yes, sir.

"Mr. Zane. That's all.
"Mr. Meads: That's all, as I say, with the privilege if anything occurs we think should be supplemented by the vouchers we have sent for we can recall him.
"The Master: Yes. That's all right."

801 ORWELL C. REEVES. recalled on behalf of defendant, testified as follows:

Direct Examination.

By Mr. Meads:

"I am the factory superintendant of the Toledo Scale Company and have been for a little over ten years. I became factory superintendent in 1906, and have continued so for the intervening years."

Then testimony as follows:

Q. I have before me a binder on the cover of which appears the words "Estimate Costs and Piece Work Price Sheets on Parts." What is that book?

A. It represents estimated costs of parts of completed scales.

Q. When was that book started?

A. About the middle of the year 1912.

Q. From what book or compilation were the estimated costs of scales taken which were given to Mr. Zolg for his first accounting inthe case?

A. They were taken from this book.

Q. From what book were the estimated costs of scales in the account prepared by Price, Waterhouse & Company taken?

A. They were taken from this book.

Q. The estimated costs, as given by Mr. Zolg, were upon what kind of scales as distinguished between Fan and Cylinder?

A. On what kind of scales?

Q. Fan or Cylinder?

A. Both.

Q. The estimated cost as given to Price, Waterhouse & Company were upon what kind, Fan or Cylinder?

A. Both kinds.

Q. And both taken from the same source?

A. Both taken from the same source and the costs made up in the same manner.

Q. This book is kept in the factory of which you are superintendent?

A. Kept in my office, yes, sir.

Q. And under your control?

A. And under my control.

802 "I have made a list of the different types of fan scales manufactured by our company."

(Witness here produces list.)

"The No. 1 fan scale was a small sized scale, primarily made to meet the needs of the confectionery business. This scale was equipped with a pan. The No. 2 scale was the same as No. 1, but equipped with a glass platter, and No. 3 was the same scale, equipped with a scoop. The cost of these fan scales, Nos. 1, 2 and 3, would be approximately the same as the Nos. 413, 414 and 415 types of scales. I have cost sheets showing the factory cost of the scales, styles No. 413, 414 and 415."

Then testimony as follows:

Q. Have you costs sheets showing the factory costs of those scales?

A. Of the 413, 414 and 415?

Q. Yes.

A. Yes, sir.

Q. Will you produce those?

A. Here they are. (Indicating pages in book produced by the witness.)

Q. What, as shown by your cost sheets are the factory costs of the 413?

Mr. Zane: We object. The book is the best evidence and he is asking for the contents of the paper.

Mr. Meads: If your Honor please, we will have to read this into the record. You will appreciate we cannot read the whole book into the record.

Mr. Zane: If they are going to offer the book we want a special objection to it, and our objection is that the book is made up after this controversy arose and is not a book kept in due order of business contemporaneously with the transactions to which it refers. It is not a book they can offer in evidence because it is hearsay unless it is a book kept in the due course of business and this is a book which is not contemporaneous with the transactions here in question, which are all prior to August 1912. The book is not competent.

The Master: I don't think this book is competent and, of course, that applies to the witness' testimony who is simply reading from the book. We get back to the question as to the competency of a book of that kind kept at that time offered by the party
803 who made the book and whose entries are self-serving. I will sustain the objection.

Mr. Meads: This is not seeking to cast an account, this book, as showing the amount of an indebtedness due from the defendant to the complainant. It is not a book of account of that sort but it is a book to show a fact material in the case as to what was the cost of a certain thing at a certain time.

Mr. Zane: You offer this as a declaration?

Mr. Meads: No.

Mr. Zane: Then it is not competent at all.

Mr. Meads: The testimony in this case is, as you will remember and brought out by Mr. Zane from Mr. Bowman: Where did you get your estimate as to costs of Fan Scales. It was Mr. Zane brought that out.

Mr. Zane: That was to show their worthlessness.

The Master: The other side might use these books, any part of them, even the ledger as admissions against the party making them. But what might be competent on the part of the plaintiff might not be competent on the part of the defendant. That's often true. Books of account are admissible because the statute practically following the common law admits books of evidence in certain cases. I do not understand that that kind of a book is admissible in this kind of a case.

Mr. Meads: We are not offering this book.

The Master: It is the same thing. The witness is reading from the book.

Mr. Meads: The question to the witness is, what was the factory cost of a particular kind of scale.

The Master: And the witness immediately refers to the book to see.

(Discussion.)

The Master: I don't think they are competent.

Mr. Meads:

Q. Mr. Reeves, do you know what the factory cost of a 413 scale was?

A. No, not without referring to the book.

Q. Can you refresh your recollection by anything before you?

A. The book would be the only means I would have of determining the cost.

Q. What book do you refer to?

A. This estimate of costs of the different scales.

804 Q. When was the book of Estimate of Costs for the 413 Scale made?

A. The costs for that particular scale were made June 10, 1913.

Q. Was the Company making that scale at that time?

A. Yes, sir.

Q. Was the book before you kept concurrently with the transactions?

A. Yes.

Q. By reference to that book can you now tell the cost of a 413 scale?

A. I can.

Q. Will you state the cost of a 413 scale?

Mr. Zane: We object.

The Master: Objection sustained. I understand this witness to say he has no independent knowledge of the cost at all and that the only information that he could have he would have to get by now reading from this book. That being true, it is not a question of refreshing recollection. The witness has not any recollection to refresh and has not any knowledge, never did know except from reading this book.

Mr. Meads: I think your Honor assumes there something that is perhaps a little more than is the fact, that he never had any knowledge.

Q. Mr. Reeves, did you ever have any knowledge as to the factory cost of the 413 Scale?

A. Certainly.

Q. How was that knowledge acquired?

A. Acquired it from this book. It would be impossible to remember all these figures of the different costs of scales.

Q. When the book was compiled did you have any knowledge?

A. Yes, sir.

Q. Or before the book was compiled?

A. No.

Q. In what way was that book compiled?

A. These costs are made up from the stock going through the factory.
Q. What do you mean by that?
A. They are different operations, as they are produced in the factory a record of their cost is kept both as to labor and material and that is recorded in this book.
805 Q. Is there any other book in which these estimated costs are kept?
A. There is none.
Q. This is the only book kept by the Company?
A. That's the only one kept by the factory.
Q. Is there any other book in which the costs of a number 1 Fan Scale are shown, the factory costs, except the book before you?
A. There is no No. 1 Fan Scale shown here—the equivalent.
Q. Or the equivalent of a No. 1?
A. There is no other book than this, no other record.

Mr. Meads: Now, if your Honor please, after what the witness has said I again ask the witness if he can state from the book the cost of the 413 scale.
Mr. Zane: Same objection.
The Master: Objection sustained.

"The No. 4 scale was a special scale. From all the information I can gather regarding it, this scale was very nearly like what was later known as the No. 153 type scale, and would compare with the cost in this book to a 453 type scale. This 453 type scale is a fan type of large size—with a ten-pound chart and ten-pound tare beam. I have a factory record of the cost of the No. 453 type scale, and it is contained in this book, previously referred to—the estimated cost sheets." (Witness indicates pages in book.) "I have before me the cost records of the 453 type scale, which was prepared on June 10th, 1913. There is no record among the books of the company made closer in time to the time at which we built the No. 4 scale.

Then testimony as follows:

Q. From such cost sheets compiled on June 10th, 1913, will you state the factory cost of the 453 scale.

Mr. Zane: Same objection.
The Master: Objection sustained.

"The No. 9 fan scale was a scale gotten out particularly for the candy trade, and took the place of the older style scales, Nos. 1, 2 and 3. This scale is approimately the same in character as the No. 403 scale. I have the cost records for the 403 scales." (Witness here turns to another page in book.) "There is no date marked on this sheet as to when such cost record was prepared, but I would think these records were prepared in 1913, shortly after we
806 we began building the scale. These records were made while we were building that scale, and the records are kept. Shortly after we started to build these scales these records started. They were

not kept entirely during the time, a portion of that time, enough to enable us to arrive at a satisfactory cost. While the records were kept, we were building the scale.

Mr. Meads:

Q. Does the record before you of the cost of these No. 403 scales show the factory cost of the No. 403 scale?

A. Yes, sir.

Q. What was the cost of that scale?

Mr. Zane: Same objection.

The Master: Objection sustained.

"The No. 10 fan scale was a small-sized scale designed to meet the needs of the spice and coffee trade, and was equipped with a pan. The No. 11 fan scale was the same as the No. 10, but equipped with a glass platter, and the No. 12 fan scale was the same scale, equipped with a scoop. The No. 10 scale in cost was closely approximated by the Style No. 413, the No. 11 scale by the style No. 414, and the No. 12 scale by the style No. 415. These scales, 10, 11 and 12, were practically the same scale as what was later known as the No. 413, 414 and 15, except that in them the means for increasing the pendulum capacity was hand-operated, while in the latter type, No. 413, this means was automatically controlled. These scales were our fan scales with the double chart but with a single pendulum. We use a single pendulum on the first chart, and to increase the capacity of the chart we add an extra weight to the pendulum. That extra weight is put on by hand on the No. 10 style scales, and on the No. 413 style scales the weight is dumped into the pendulum by a little lever. In our judgment, the cost of the two styles of scales would compare very closely. We have cost records of No. 413. I have those cost records here.

Mr. Zane: We object He has already asked these identical questions as to 413, 414 and 415, and they have been passed upon by the court.

"The Master: I don't think we had better duplicate.

"The Witness: I understand there is a similarity of these scales 1, 2 and 3, and 10, 11 and 12. They are the same scales, excepting 1, 2 and 3——

807 "Mr. Zane: I was not questioning what you said.

"The Witness: I was telling you why they have the same cost, because on the 1, 2 and 3, and 10, 11 and 12. They are the same scales, excepting 1, 2 and 3——

"Mr. Zane: I was not questioning what you said.

"The Witness: I was telling you why they have the same cost, because on the 1, 2 and 3 we exhibited no indication to the customer, while on the 10, 11 and 12 we did.

"Mr. Meads: If your Honor please, I offer to show by the witness that the cost of the 413 scale is a certain sum of money.

"Mr. Zane: Let him go ahead and show that."

Then testimony as follows:

Mr. Meads:

Q. Do you know Mr. Reeves, what the factory cost of the 413 scale is?
A. Yes, sir.
Q. What is it?

Mr. Zane: We object as reading from the book.
The Master: I have already ruled that the book is not competent and therefore the witness reading from it is not giving competent testimony.
Mr. Meads: I have asked the witness now whether he has any knowledge as to the costs of the 413 scale and he has said "yes, sir."
The Master: And immediately turns to the book. I don't think there can be any misunderstanding among us. As I understand this witness to say he has not any knowledge upon the subject except what he obtains from the book before him.
Mr. Meads: Well, I don't think the witness went quite so far as that, your Honor please.
The Master: I so understand him.

Mr. Meads:

Q. In the first instance, Mr. Reeves, your knowledge as to the cost of a 413 scale was derived from what?
A. From this book.
Q. Well, before the book was fixed, what knowledge did you have of the component parts of the 413 scale?
A. I had none.
Q. Well, you started to make the book as the scale was being made, is that right?
A. Yes.

Mr. Zane: We object. He didn't say he made the book.

Mr. Meads:

Q. Well, under your direction?
A. Under my direction.
808 Q. What elements or items went into the book in question?
A. Items of labor, items of material, factory labor and materials that go to make up these parts for the finished scale.
Q. What items of labor and what items of material?
A. They have not got it classified as to the amount of each.
Q. I am not asking for amounts now. First, what went into the book in the way of material?
A. Everything for the production of the scale, *con-* consisting of cast iron parts, glass, brass, steel, etc.
Q. You made those up for a certain number of scales?
A. Made them up for a certain number of scales.

Q. For how many usually?
A. Usually for a lot of a hundred.
Q. A test lot?
A. A test lot.
Q. And after you had determined how much material went into the scale then what did you do with that figure?
A. That was recorded in the book.
Q. This book before you?
A. If that sheet is in there. All the detail sheets are not in this book; they have probably been separated some of them have been kept and some have not.
Q. The items that do appear in this book for material represent what?
A. They represent the parts going into the scales as I described before, the brass, steel, cast iron, glass, etc.

Mr. Zane: We object to an examination of the contents of the book because the book is incompetent. I can't see what good it will do.
The Master: I think he may find out how the book is made up with a view to determine whether it is competent.
Mr. Zane: Well, I withdraw the objection.

Mr. Meads:

Q. What is the first item which you treated in determining the factory cost of a scale?
The Master: That calls for information not necessarily in this book.
Mr. Meads: No, not necessarily.
Mr. Zane: He is reading from the book.
A. I was looking to see whether it was in this book.
809 In this particular instance the first amount listed here is the pan, platter and scoop, giving the cost of each. The second item is a different kind of a pan.

The Master: That's not the question you were asked.

A. That's the way I understood it. In other words, they are arriving at the material cost first.

Mr. Meads:

Q. Now, in the book before you as to the 413 scale, without giving the amounts, is there a list of the cost of separate parts?
A. There seems to be on that scale, yes.
Q. And following the cost of each separate part what is the next entry on the book in question?

Mr. Zane: I think we will object to this.
The Master: Objection sustained.
Mr. Meads: Your honor, how is the court afterwards to determine what this book contains which we are seeking to offer either in evidence or which we seek to have the witness refresh his recollection by.

The Master: If the court cares to see it it can be produced at that time but the objection to this testimony does not go to the form in which certain enteries are made on the books. It is quite immaterial how they are made or in what form the book is gotten up. The question is whether the book itself, in view of the way that it was made, is competent when offered by the party making it in a case of this kind. I do not think that it is.

Mr. Meads: It is a book made concurrently with the transaction which it seeks and purports to represent, that is the cost of, in this particular instance, a scale.

The Master: The testimony does not bring the book within any of the exceptions to the rule forbidding hearsay and is not sufficient to render the book or entries therein competent.

(Discussion.)

Mr. Meads:

Q. Will you please turn to the testimated cost sheets before you and to that portion thereof which shows the cost of the 413 scale?
A. (Witness turns to page showing cost of 413 scale.)
Q. The 413 scale is shown on how many pages of the cost record?
A. Four.
Q. Under what date?
A. Under date of June 10th, 1913.
Q. Have you those four pages before you?
810 A. Yes.

Mr. Meads: I offer, if the Master please, the four pages identified by the witness from the book before him being the estimated costs of the 413 scale and ask that the reporter mark them as Defendant's Exhibit 28.

Mr. Zane: We object.

The Master: Objection sustained.

(Said four sheets being the estimated cost of the 413 scale, so offered, but not received in evidence, marked for identification Defendant's Exhibit 28, sheets 1, 2, 3 and 4, respectively, offered but not admitted.)

Mr. Meads:

Q. Have you before you the cost sheets for the 453 scale?
A. Yes.
Q. Will you please turn to those?
A. (Witness turns to pages showing cost sheets of 453 scale.)
Q. Of how many pages do they consist?
A. Four pages.

Mr. Meads: I offer in evidence, if your Honor please, the four pages identified by the witness, being the cost sheets of the 453 scale, and ask that they be marked Defendant's Exhibit 29, sheets 1, 2, 3 and 4.

Mr. Zane: Same objection.

The Master: Objection sustained.

Sheet 1.

Offered But Not Admitted.

229, 882, 404.				413	414.	415.
Pan-Platter-Scoop	1	.....	.....	31 95	18.00	171.47½
990, 991, 992.						
Pan-Platter-Scoop Spider	1	.....	Gold	33 03½	52 54½	33 99
Shot Box Weights	..	.....	.....	25	.....	.....
Spider Agate Caps	2	4	"	5 21	.....	.....
¼ x 8/32 R. H. Brass Mach. Screws	4	R610	"	67	.....	.....
Lever	1	96-97	"	86 29¾	88 28½	86 29¾
Base Agate Caps	2	5	"	5 19	.....	.....
¼" x 8/32 B. H. Brass Mach. Screws	2	R610	"	67	.....	.....
Lever Pivot Thrusts	4	941	Semi	58	.....	.....
Connecting Link	1	715	"	87¾	.....	.....
" " Pin	2	88	"	14	.....	.....
" " " ret. Clips	2	89	"	47	.....	.....
Base Lug	1	124	"	1 42	.....	.....
" " Adjusting Screws	2	366	"	25½	.....	.....
⅝ x 12/24 R. H. Iron Mach. Screw	1	R676	"	17¼	.....	.....
Lever Dust Shield	1	30	Gold	3 02½	.....	.....
¼" x 8/32 B. H. Brass Mach. Screws	2	R610	"	33½	.....	.....
Clevis Bushing	1	557	.....	54¼	.....	.....
Base	1	560	Gold	93 49	.....	.....
Patent Plate	1	914	"	2 05	.....	.....
3/16" x 4/36 R. H. Iron Mach. Screw	2	R697	"	17½	.....	.....
Dash Pot Assemb. Complete	1	740	.....	17 46	.....	.....

¼" x 8/32 R. H. Iron Mach. Screws	2	R698	Semi	20¼	.....	.....	
Clevis Pin Assemb	1	711	Gold	27½	.....	.....	
Leveling Screw	1	566	"	3 81½	.....	.....	
" " Lock Nut	1	663	Semi	12	.....	.....	
" " Washer	1	564	Gold	05½	.....	.....	
" Bar	1	598	Semi	1 82	.....	.....	
" " Retainers	2	664	"	16½	.....	.....	
¼" x 8/32 R. H. Iron Mach. Screw	2	R698	"	20¼	.....	.....	
Sub-base	1	562	Gold	24 28¼	.....	.....	
" " feet	4	63	.....	3 80	.....	.....	
1½" x 14/20 R. H. Iron Mach. Screw	1	R700	Semi	60	.....	.....	
¼" x ¾" Iron Washers	1	R430	"	05½	.....	.....	
Housing	1	2594	Gold	134 13½	.....	.....	
⅝" x 12/24 R. H. Iron Mach. Screws	4	R676	Semi	34½	.....	.....	
¼" x ¾ Iron Washers	4	R430	"	21½	.....	.....	
Dowel Pins	2	423	"	11	.....	.....	
Carried Forward	..	.....	.....	454 46¼	462.01	504 94¼	

413 "A" Scale "Gold."

Sheet 2.

Offered But Not Admitted.

				413	414.	415.
Brought Forward	..	.....	.....	454 46¼	462 01	594 94¼
Lower Housing Scroll with Hood	1	2822	Gold	8 46	.....	.....
" " " Thrusts Screws	2	661	"	87	.....	.....
" " " without Hood	1	2152	"	5 75¾	.....	.....
5/16" x 8/32 R. H. Brass Mach. Screws	2	R622	"	36	.....	.....
Lower Housing Glass	2	2784	.....	13 00	.....	.....
Glass Retaining Clips	5	2788	Gold	38¾	.....	.....
⅛" x 2/56 R. H. Brass Mach. Screws	5	R620	"	53	.....	.....
Housing Opening Cover	1	699	"	4 97½	.....	.....
¼" x 8/32 R. H. Brass Mach. Screw	1	R610	"	16¾	.....	.....
Back Housing Shield	1	2503	"	5 23¾	.....	.....
¼" x 8/32 R. H. Brass Mach. Screw	2	R610	"	33½	.....	.....
Front Housing Shield	1	2525	"	5 38	.....	.....
½" x 8/32 R. H. Iron Mach. Screw	2	R687	"	50½	.....	.....
Pendulum Operating Knob	1	8	.....	3 70½	.....	.....
" " " Set Screw	1	2534	Gold	09¾	.....	.....
Front Housing Scroll	1	1637	"	10 14½	.....	.....
5/16" x 8/32 R. H. Brass Mach. Screws	4	R622	"	72	.....	.....
Front Housing Glass	1	749	.....	3 61¾	.....	.....
Back Housing Scroll	1	1483	Gold	8 60½	.....	.....
5/16" x 8/32 R. H. Brass Mach. Screws	3	R622	"	54	.....	.....
Back Housing Glass	1	751	.....	1 60	.....	.....
Chart Glass Felts	6	1009	.....	06	.....	.....

Housing Opening Plate	1	2512	Gold	5	81¾	.....	.....
Flash Opening Scroll	1	430	"	2	15½	.....	.....
¼" x 8/32 R. H. Brass Mach. Screw	2	R610	"		33½	.....	.....
Flash Opening Glass	1	753			20	.....	.....
Glass Retaining Clips	2	2788	Gold		31	.....	.....
¼" x 2/56 F. H. Iron Mach. Screw	2	R670	Semi		06½	.....	.....
Housing Protector Plate	1	2841	Gold	1	99	.....	.....
" " " ret. Screws	2	484	"		24	.....	.....
Chart	1	110		41	00	.....	.....
Large Chart Screws	..	.....	Gold	.....		.....	.....
Small " "	1	484	"		60	.....	.....
Split Washers	4	330	Semi		23	.....	.....
Upper Pendulum Bumper	1	78			33½	.....	.....
Carried Forward	..	.....		582	80	590 34¾	723 28

413 "A" Scale "Gold."

Sheet 3.

Offered But Not Admitted.

				413	414.	415.
Brought Forward	..	.....	.....	582 80	590 34¾	723 28
Race Plate	2	2608	Gold	8 54½	.....	.....
" Locating Pin & Screw Assemb	2	2564	.....	92	.....	.....
" " Screws	2	2562	.....	45½	.....	.....
" Spacing Tube	1	2565	.....	64¾	.....	.....
" " " & Lower Pend. Bumper	1	2638	.....	1 93¾	.....	.....
Pendulum Pivot Retainer	1	2514	Semi	1 12½	.....	.....
" " " Screw	1	2568	Gold	16¼	.....	.....
" " " Pin	1	2589	Semi	04	.....	.....
" Thrust Plate Assemb	1	2571	.....	1 09¼	.....	.....
⅜" x 8/32 R. H. Iron Mach. Screw	2	R680	Semi	22¼	.....	.....
Flash Sign Assemb. & Printed	1	2748	.....	4 12¼	.....	.....
" " Shoulder Screw	1	429	Semi	23¼	.....	.....
Carrier Arm Assemb. Complete	1	2605	.....	29 67¾	.....	.....
" " Extension	1	582	Nickle	2 19	.....	.....
¼" x 8/32 R. H. Iron Mach. Screw	1	R698	"	11	.....	.....
Carrier Arm Stud Plate Screw	3	993	"	40½	.....	.....
Pendulum Assemb. Complete	1	2747	Gold	70 89½	.....	.....
Hook & Plate Assemb	1	1008	.....	5 68	.....	.....
Hook Spacing Collar	1	374	.....	19¾	.....	.....
Clevis Pin	1	54	.....	03	.....	.....
Ft. & Book. Hand Assemb	1	2737	.....	19 68½	.....	.....
Clevis Pins	2	54	.....	06	.....	.....

⅝" x 8/32 R. H. Iron Mach. Screws	2	R680	Semi	22¼	.....	.....
Hand Washer	1	2646	.....	11¼	.....	.....
Shipping Pin—Long	1	596	.....	1 21¾	.....	.....
" " Washer	1	1139	.....	02⅜	.....	.....
Cotter Pin	1	512	.....	02⅛	.....	.....
Shipping Pin Short	1	360	.....	28½	.....	.....
Shipping Tag	1	Form 80	.....	06	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Inspection Sheet	1	Form 32	.....	19	.....	.....
Chart Protector	1	13116	.....	35¼	.....	.....
.4 Gal Dash Pot Oil	..	.....	.....	16	.....	.....
Carried Forward	..	.....	.....	734 07¼	741 62	874 55¼

413 "A" Scale "Gold."

814 DEF. EX. 28.

Sheet 4.

Offered But Not Admitted.

				413	414.	415.
Brought Forward	..	.....	.....	734 07¼	741 62	874 55¼
19—Asemble	..	.....	.....	12 00	.....	.....
21—Fitting Automatic Flash Arms	..	.....	.....	8 00	.....	.....
22— " race & operating knob	..	.....	.....	14 00	.....	.....
18—Clean dash pot	..	.....	.....	1 40	.....	.....
24—Line Hands	..	.....	.....	16 00	.....	.....
37—Scrolling	..	.....	.....	14 00	.....	.....
23—Balancing	..	.....	.....	30 00	.....	.....
16—Wash & Clean	..	.....	.....	4 50	.....	.....
First Inspection	..	.....	.....	20 00	.....	.....
Final "	..	.....	.....	10 00	.....	.....
Scale Inspected	..	.....	.....	863 97¼	871 52	1,004 45¼
Reflector Assemb. Complete	1	603	.....	32 59¼	.....	.....
Scale with Reflector	..	.....	.....	896 56½	904 11¼	1,037 04½

413 "A" Scale "Gold."

Sheet 1.

Offered But Not Admitted.

91, 266, 2843.				453.	454.	455.
Pan-Platter-Scoop	1	.....	.....	68 07½	60 00	181 88¼
1015, 138, 987.						
Pan-Platter-Scoop	1	.....	Gold	48 05	49 71	42 39
Shot Box Weights	3	310	.....	4 89¾	.....	.....
Spider Agate Caps	2	4	Gold	5 21	.....	.....
¼ x 8/32 R. H. Brass Mach. Screws	4	R610	"	67	.....	.....
Lever & Tare Beam Assemb	1	25–258	"	171 30¾	177 31¼	171 30¾
Base Agate Caps	2	5	"	5 19	.....	.....
¼ x 8/32 R. H. Brass Mach. Screws	4	R610	"	67	.....	.....
Lever Pivot Thrusts	4	941	Semi	58	.....	.....
Connecting Link	1	715	"	87¾	.....	.....
" " Pins	2	88	"	14	.....	.....
" " " ret. Clips	2	89	"	47	.....	.....
Base Lug	1	124	"	1 42	.....	.....
" " Adjusting Screws	2	366	"	25½	.....	.....
⅝ x 12/24 R. H. Iron Mach. Screw	1	R676	"	17¼	.....	.....
Lever Dust Shield	1	35	Gold	3 18¾	.....	.....
¼ x 8/32 R. H. Brass Mach. Screws	2	R610	"	33½	.....	.....
Base	1	479	"	133 53¼	.....	.....
Patent Place	1	914	"	2 05	.....	.....
3/16 x 4/36 R. H. Iron Mach. Screws	2	R697	"	17½	.....	.....
Dash Pot Assemb	1	740	.....	17 46	.....	.....
¼ x 8/32 R. H. Iron Mach. Screw	2	R698	Semi	20¼	.....	.....

Sheet 1—*Continued.*

91, 266, 2843.

				453.	454.	455.
Leveling Screw	1	2596	Gold	3 37½	.....	.....
" " Washer	1	564	"	05½	.....	.....
" " Lock Nut	1	663	"	2 70½	.....	.....
" Bar	1	481	Semi	12	.....	.....
" " Retainers	2	664	"	16½	.....	.....
¼ x 8/32 R. H. Iron Mach. Screw	2	R698	"	20¼	.....	.....
Sub-base	1	480	Gold	32 30¼	.....	.....
Sub-base feet	4	63	.....	3 80	.....	.....
1½ x 14/20 R. H. Iron Mach. Screw	1	R700	Semi	60	.....	.....
Housing	1	2501	Gold	180 06¾	.....	.....
⅝ x 12/24 R. H. Iron Mach. Screw	4	R676	Semi	34½	.....	.....
¼ x ⅜ Iron Washer	4	B430	"	21½	.....	.....
Dowel Pins	2	423	"	11	.....	.....
Lower Housing Scroll with Hood	1	2779	Gold	7 68¾	.....	.....
" " " Thumb Screws	2	661	"	87	.....	.....
Carried Forward	..	.....	.....	697 54¾	697 13¾	805 69½

453 "A" Scale "Gold."

Sheet 2.

Offered But Not Admitted.

				453.	454.	455.
Brought Forward	..	.....	.....	697 54¾	697 13¾	805 69½
Lower Housing Scroll without Hood	1	2726	Gold	5 98¼	.....	.....
⅜ x 8/32 R. H. Brass Mach. Screws	2	R605	"	38½	.....	.....
Lower Housing Glass	2	2727	.....	13 00	.....	.....
Glass Retaining Clips	4	2788	Gold	31	.....	.....
⅛ x 2/56 R. H. Brass Mach. Screws	4	R620	"	42½	.....	.....
Housing Opening Cover	1	2560	"	4 80	.....	.....
¼ x 8/32 R. H. Brass Mach. Screw	1	R610	"	16¾	.....	.....
Back Housing Shield	1	2503	"	5 23¾	.....	.....
¼ x 8/32 R. H. Brass Mach. Screw	2	R610	"	33½	.....	.....
Front Housing Shield	1	2525	"	5 38	.....	.....
½ x 8/32 R. H. Iron Mach. Screw	2	R687	"	50½	.....	.....
Pendulum Operating Knob	1	8	.....	3 70½	.....	.....
" " " Set Screw	1	2534	Gold	09¾	.....	.....
Front Housing Scroll	1	1635	"	14 20¾	.....	.....
5/16 x 8/32 R. H. Brass Mach. Screws	4	R622	"	72	.....	.....
Front Housing Glass	1	918	.....	6 53½	.....	.....
Black Housing Scroll	1	259	Gold	10 25¼	.....	.....
5/16 x 8/32 R. H. Brass Mach. Screws	4	R622	"	72	.....	.....
Back Housing Glass	1	919	.....	2 12	.....	.....
Chart Glass Felts	8	1009	.....	08	.....	.....
Housing Opening Plate	1	2515	Gold	7 18¼	.....	.....
Flash Opening Scroll	1	430	"	2 15½	.....	.....

Sheet 2—*Continued.*

				453.	454.	455.
¼ x 8/32 R. H. Brass Mach. Screws	2	R610	"	33½	.....	.....
Flash Opening Glass	1	753	.....	20	.....	.....
Glass Retaining Clips	2	2788	Gold	31	.....	.....
¼ x 2/56 F. H. Iron Mach. Screw	2	R670	Semi	06½	.....	.....
Chart	1	143	.....	38 00	.....	.....
Small Chart Screws	4	484	Gold	48	.....	.....
Split Washers	4	330	Semi	18½	.....	.....
Large Chart Screws	2	224	Gold	58¼	.....	.....
Upper Pendulum Bumper	1	78	.....	33½	.....	.....
Race Plate	2	2561	Gold	9 60	.....	.....
" Locating Pin & Screw Assemb	2	2564	.....	92	.....	.....
" Plate Locating Screw	2	2562	.....	45½	.....	.....
" Spacing Tube	1	2565	.....	64¾	.....	.....
" " " & Lower Pend. Bumper	1	2567	.....	1 52	.....	.....
Carried Forward	..	.....	.....	835 48½	835 07½	943½ 63¼

453 "A" Scale "Gold."

Sheet 3.

Offered But Not Admitted.

				453.	454.	455.
Brought Forward	..	.....	.....	835 48½	835 07½	943 63¼
Pendulum Pivot Retainer	1	2514	Semi	1 12½	.....	.....
" " " Screw	1	2568	Gold	16¼	.....	.....
" " " Pin	1	2589	Semi	04	.....	.....
" Thrust Plate Assemb.	1	2571	.....	1 09¼	.....	.....
⅜ x 3/32 R. H. Iron Mach. Screws	2	R680	Semi	22¼	.....	.....
Flash Sign Assemb. & Printed	1	2588	.....	4 32¼	.....	.....
" " Shoulder Screw	1	429	.....	23¼	.....	.....
Carrier Arm Assemb. Complete	1	2556	.....	28 79¼	.....	.....
" " Extension	1	2531	.....	2 19½	.....	.....
¼ x 8/32 R. H. Iron Mach. Screw	1	R698	Nickle	11	.....	.....
Carrier Arm Stud Plate Retaining Screws	3	993	.....	40½	.....	.....
Pendulum Assemb. Complete	1	2612	.....	72 83	.....	.....
Hook & Plate Assemb.	1	1007	Gold	5 97	.....	.....
" Spacing Collar	1	374	.....	19¾	.....	.....
Clevis Pin	1	54	.....	03	.....	.....
Ft. & Bk. Hand Assemb.	1	2586	.....	20 51½	.....	.....
Clevis Pins	2	54	.....	06	.....	.....
⅜ x 8/32 R. H. Iron Mach. Screws	2	R680	Semi	22¼	.....	.....
Hand Washer	1	2646	.....	11½	.....	.....
Clevis Bushing	1	557	.....	54¼	.....	.....
" Pin Assemb.	1	711	Gold	27½	.....	.....
Shipping Pin—Long	1	596	.....	1 21¾	.....	.....
" " Washer	1	1139	.....	02⅜	.....	.....

Sheet 3—*Continued.*

				453.	454.	455.
Cotter Pin	1	512		02⅛	.....	.....
Shipping Pin—Short	1	360		28½	.....	.....
Shipping Tag	1	Form 80		06	.....	.....
Workman's Slip	1	" 19		19¼	.....	.....
Inspection Sheet	1	" 32		19	.....	.....
Chart Protector	1	13116		35¼	.....	.....
4 Gal. Dash Pot Oil	..	.....		16	.....	.....
Carried Forward	..	.....		977 44½	977 03½	1,085 59¼

453 "A" Scale "Gold."

Sheet 4.

64—339

Offered But Not Admitted.

				453.	454.	455.
Brought Forward	..	.....	.....	977 44½	977 03½	1,085 59¼
19—Assemble	..	.....	.....	12 00	.....	.....
21—Fitting Automatic Flash Arms	..	.....	.....	8 00	.....	.....
22— " race & operating knob	..	.....	.....	14 00	.....	.....
18—Clean dash pot	..	.....	.....	1 40	.....	.....
24—Line Hands	..	.....	.....	16 00	.....	.....
37—Scrolling	..	.....	.....	14 00	.....	.....
25—Balancing	..	.....	.....	30 00	.....	.....
16—Wash & clean	..	.....	.....	4 50	.....	.....
First Inspection	..	.....	.....	20 00	.....	.....
Final "	..	.....	.....	10 00	.....	.....
Scale Inspected	..	.....	.....	.....	.....	.....
18 B. C. Wrapping Twine	..	.....	.....	09	.....	.....
6 Ply Jute Twine	..	.....	.....	02	.....	.....
Tacks	..	.....	.....	02¾	.....	.....
36 x 48 Wrapping Paper	..	.....	.....	38¼	.....	.....
30 x 40 " "	..	.....	.....	64	48	64
Directions Book	1	Form 83	.....	1 50	.....	.....
Window Card	1	.....	.....	1 82½	.....	.....
Poise Strip	1	165	.....	11¼	.....	.....
End Shift Blocks	..	13001	.....	12	36	36
5D Coated Wire nails to retain 13001	..	.....	.....	01½	04½	04½
Platter Rack Assemb	1	.....	.....	00	2 28⅛	00

Sheet 4—*Continued.*

				453.	454.	455.
7D Coated Wire Nails	..	.....	.....	00	05¼	00
2½"-14 Drive Screws	6	R662	.....	87	.....	.....
Shipping Crate Assemb	..	.....	.....	58 10¼	.....	.....
4 Hole Board	1	13010	.....	54	.....	.....
2 ¾-14 Iron Wood Screws	4	R664	.....	70	.....	.....
⅜ x ⅞ Iron Washer	4	.....	.....	25	.....	.....
Packing Scale	..	.....	.....	7 50	.....	.....
Scale Packed for Shipment	..	.....	.....	1,180 04	1,181 95¼	1,288 45¾

453 "A" Scale "Gold."

819 (Said four sheets being the estimated cost of the 453 scale, so offered, but not received in evidence, marked for identification Defendant's Exhibit 29, sheets 1, 2 3 and 4 respectively, offered but not admitted.)

Mr. Meads:

Q. Have you any cost sheets or records showing the cost of the 405 scale?
A. Yes.
Q. Will you please turn to such?
A. (Witness turns to pages showing cost of 405 scale.) Here it is.
Q. Consisting of how many pages?
A. Two pages.
Q. Was that record kept under your supervision at the time these scales were being built?
A. There were two costs, one figured on gold and one on blue, consisting of two pages each, that is, there are four pages there, two for the blue and two for the gold.
Q. What?
A. Two for the blue and two for the gold.
Q. As to the scales 403, 404 and 405?
A. As to scales to 403, 404 and 405.

Mr. Meads: I offer the instrument identified by the witness and ask that that be marked Defendants Exhibit 30, sheets 1, 2, 3 and 4.
Mr. Zane: Same objection.
The Master: Objection sustained.

(Said sheets being the estimated cost of scales 403, 404 and 405, so offered, but not received in evidence marked for identification Defendant's Exhibit 30, sheets 1, 2, 3 and 4 respectively, offered but not admitted.)

Sheet 1.

Offered But Not Admitted.

					403.	404.	405.
Pan-Platter Scoop	1	2104	Gold		.....	.....	.....
	..	2019			27 29¾	14 00	103 79½
	..	2140	Gold		.....	.....	.....
2123, 2124, 2089 Spider	1	.....	Gold		3 23¼	3 23¾	5 87¼
Spided Retaining Screws	2	R697	Gold		18½	.....	.....
Plunger Regulating Cap	1	2062	Gold		5 20½	.....	.....
Patent Plate	1	2111	Gold		1 43	.....	.....
" " retaining screws	2	R697	Gold		18½	.....	.....
Housing Opening Plate	1	2072	Gold		9 12½	.....	.....
" " " retaining screws	2	R705	Gold		19½	.....	.....
Front Housing Scroll	1	2067	Gold		10 35	.....	.....
" " " retaining screws	4	R705	Gold		39	.....	.....
" Housing Glass	1	2069			2 75	.....	.....
Back Housing Scroll	1	2068	Gold		6 55	.....	.....
" " " retaining screws	3	R697	Gold		27¾	.....	.....
" housing Glass	1	2070			1 50	.....	.....
Shift Opening Cover	1	2148	Gold		1 93½	.....	.....
" " " retaining screws	2	484	Gold		34	.....	.....
"A" Pendulum Assb. Complete	1	2101			35 51¼	.....	.....
False Bottom	1	2074			2 07	.....	.....
" " retaining screw	1	R698	Semi		10	.....	.....
Pendulum Bumper Assb	1	2103			64	.....	.....
" " retaining screws	2	R697	Semi		17	.....	.....

Chart	1	107	.....	38 02	.....	.....
" Screws	4	484	Gold	68	.....	.....
" " counterbalance washers	2	320	Gold	09½	.....	.....
Housing Agate Bridge Assb	1	2093	.....	12 17½	.....	.....
" " " " retaining screws	2	B683	Semi	22	.....	.....
Check Riser Assb	1	2105	.....	4 23¾	.....	.....
" " retaining screws	1	R680	Semi	11	.....	.....
Connecting Link Pin	1	2113	.....	13¼	.....	.....
Shift Lug	1	2154	.....	92¼	.....	.....
" " Screw	1	2020	.....	11¾	.....	.....
" " Adj. Screw	2	R711	Semi	20	.....	.....
Leveling Screw Assb	1	2090	.....	2 89	.....	.....
" " Washer	1	564	.....	05½	.....	.....
" " Feet	1	2109	.....	38¼	.....	.....
" " Rubber	1	.....	.....	04	.....	.....
Base	1	2000	Gold	52 26½	.....	.....
Housing	1	2114	Gold	74 67½	.....	.....
Base to housing screws	3	R680	Semi	33	.....	.....
Carried Forward	..	.....	.....	296 99	283 69¾	376 12¾

403-404-405 "A" Scale "Gold."

Offered But Not Admitted.

				403.	404.	405.
Brought Forward	..	.....	.....	296 99	283 69¾	376 12¾
Base Plate Assb	1	2126	.....	100 98¾	.....	.....
" " retaining screws	4	R698	.....	40	.....	.....
.31 Gal. Dash Pot Oil	..	.....	.....	12½	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Shipping Tag	1	Form 80	.....	06	.....	.....
25 yards Cheese Cloth	..	.....	.....	72	.....	.....
Assemble Complete	..	.....	.....	26 00	.....	.....
Wash & Clean	..	.....	.....	1 50	.....	.....
Final Inspection	..	.....	.....	7 50	.....	.....
Scale Inspected	..	.....	.....	434 47½	421 18¼	513 61¼
Reflector Assb	1	2022	Gold	30 09½	.....	.....
" retaining screw	1	R682	Gold	12¼	.....	.....
Scale with reflector	..	.....	.....	464 69¼	451 40	543 83
Scale with reflector packed for shipment	..	.....	.....	498 32	485 02¾	577 45¾
Scale with reflector & 3" stand packed for shipment	..	.....	.....	542 46¼	529 17	621 60
Scale with reflector & 5" stand packed for shipment	..	.....	.....	543 59¾	530 30½	622 73½

403-404-405 "A" Scale "Gold."

Offered But Not Admitted.

				403.	404.	405.
2104, 2019, 2140.						
Pan-Platter-Scoop	1	.....	Gold	27 29¾	14 00	103 79½
2123, 2124, 2089.						
Pan-Platter-Scoop	1	.....	Gold	3 23¼	3 23¾	5 87¼
Spider Retaining Screws	2	R697	Gold	18½	.....	.....
Base	1	2000	Gold	52 26¼	.....	.....
Housing	1	2114	Gold	74 67½	.....	.....
" to base retaining screws	3	R680	Semi	33	.....	.....
Plunger Regulating Cap	1	2062	Gold	5 20½	.....	.....
Patent Plate	1	2111	"	1 43	.....	.....
" " retaining screws	2	R697	"	18¼	.....	.....
Housing Opening Plate	1	2072	"	9 12½	.....	.....
" " " retaining screws	2	R705	"	19½	.....	.....
Front Housing Scroll	1	2067	"	10 35	.....	.....
" " " retaining screws	4	R705	"	39	.....	.....
" Housing Glass	1	2069	.....	2 75	.....	.....
Back Housing Scroll	1	2068	Gold	6 55	.....	.....
" " " retaining screws	3	R697	"	27¾	.....	.....
" " Glass	1	2070	.....	1 50	.....	.....
Shift Opening Cover	1	2148	Gold	1 93½	.....	.....
" " " retaining screws	2	484	"	34	.....	.....
Pendulum Assb. Complete	1	2118	.....	.....	.....	.....
False Bottom	1	2074	Semi	2 07	.....	.....
" " retaining screws	1	R698	Semi	10	.....	.....

Sheet 3—*Continued.*

				403.	404.	405.
Pendulum Bumper Assb.	1	2103	.....	64	.....	.....
" " retaining screws	2	R697	Semi	17	.....	.....
Chart "B"	1	104	.....	26 62	.....	.....
Chart Screws	4	484	Gold	68	.....	.....
" " Counterbalance Washers	2	330	.....	09½	.....	.....
Housing Agate Bridge Assb.	1	2093	.....	12 17½	.....	.....
" " " retaining screws	2	R683	Semi	22	.....	.....
Check Riser Assb.	1	2105	.....	4 23¾	.....	.....
" " retaining screws	1	R680	Semi	11	.....	.....
Connecting Link Pin	1	2113	.....	13¼	.....	.....
Shift Lug	1	2154	.....	92¼	.....	.....
" " Screw	1	2020	.....	11¾	.....	.....
" " Adjusting Screw	2	R711	Semi	20	.....	.....
Leveling Screw Assb.	1	2090	.....	2 89	.....	.....
" " Washers	1	564	.....	05½	.....	.....
" " Feet	1	2109	.....	38½	.....	.....
Carried Forward	..	.....	.....	286 34¾	273 05½	365 48½

403-404-405 "B" Scale "Gold."

Sheet 4.

Offered But Not Admitted.

				403.	404.	405.
Brought Forward	..	.....	.....	286 34¾	273 05½	365 48½
Leveling Screw Foot Rubber	1	.....	.....	04	.....	.....
Base Plate Assembled	1	2126	.....	100 98¾	.....	.....
" " retaining screws	4	R698	Semi	40	.....	.....
.31 Gal. Dash Pot Oil	..	.....	.....	12½	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Shipping Tag	1	Form 80	.....	06	.....	.....
25 yards Cheese Cloth	..	.....	.....	72	.....	.....
Assemble Complete	..	8	.....	26 00	.....	.....
Wash & Clean	..	.....	.....	1 50	.....	.....
Final Inspection	..	.....	.....	7 50	.....	.....
Scale Inspected	..	.....	.....	423 87¼	410 58	503 01
Reflector Assb	1	2022	Gold	30 09½	.....	.....
" retaining screw	1	R682	"	12¼	.....	.....
Scale with reflector	..	.....	.....	454 09	440 79¾	533 22¾
Scale with reflector packed for shipment	..	.....	.....	487 71¾	474 42½	566 85½
Scale with reflector & 3" stand packed for shipment	..	.....	.....	530 86¾	517 57½	610 99¾
Scale with reflector & 5" stand packed for shipment	..	.....	.....	532 06¼	518 77	612 19¼

403-404-405 "B" Scale "Gold."

824 "The No. 17 scale was a medium size fan type scale designed for delicatessen purposes and was equipped with a pan; No. 18 was the same scale, but equipped with the platter, and No. 19 was the same scale equipped with a scoop. The body of the scales was the same, other than the receptacle. We have no cost sheets for No. 17, 18 & 19. We afterwards manufactured 620, 621, 622. These scales were substantially the same as the scales style Nos. 620, 621 and 622, respectively. We have the cost records of the 620 scales, and have separate cost sheets showing the cost of the 620 scale. We had other delicatessen scales also, numbered respectively 20, 21, 22, 23, 24, 25 and 26, which were substantially the same as the scales later known as styles No. 620 to 625, respectively. These were all scales of the same size designed for delicatessen purposes and had a five-pound chart and a five-pound tare beam, a medium size fan scale. We have no cost sheets for 21, 21, 22.

Then testimony as follows:

Q. Now, will you turn to the cost of the 620 scale?
A. (Witness turns to pages containing cost of 620 scale.) These are the cost sheets for 620, 621 and 622.
Q. When were those made?
A. They were made October 10, 1912.
Q. And consist of how many pages?
A. Consist of three pages.
Q. Were they made during the time in which you were making the 620 type of scale?
A. Yes.
Q. Made under your supervision?
A. They were.

Mr. Meads: I offer in evidence, if the court please, the cost sheets identified by the witness of the scales 620, 621 and 622, consisting of three pages and ask that *it* be marked Defendant's Exhibit 31.)
Mr. Zane: Same objection.
The Master: Objection sustained.

(Said pages showing the estimated cost of scales 620, 621 and 622, so offered, but not received in evidence, marked for identification Defendant's Exhibit 31, sheets 1, 2 and 3 respectively, offered, but not admitted.)

Offered But Not Admitted.

233, 234, 650.				620.	621.	622.
Pan-Platter-Scoop	1	.....	Gold	39 41½	60 00	110 78½
Housing	1	2792	"	127 33½	.....	.....
Base & Base Horn Assb	1	415	"	106 31½	.....	.....
5/8" x 12/24 R. H. Iron Machine Screw	4	R676	Semi	69	.....	.....
¼" x ¾ C. D. Iron Washers	4	R430	"	21½	.....	.....
1016, 988, 989.						
Pan-Platter-Scoop Spider	1	.....	Gold	36 34¾	58 49½	37 42½
Lever & Tare Beam Assembled	1	255-22	"	127 58½	130 55½	127 58½
Pendulum Assb. Complete	1	597	"	33 89¼	.....	.....
Plunger Assb. Complete	1	326	"	9 53¼	.....	.....
Dash Pot Cap Washer	1	105	Semi	25	.....	.....
Pendulum Pivot Thrust Assb	2	344	"	1 24	.....	.....
Pendulum Pivot Thrust Ret. Screws	4	R698	"	40½	.....	.....
Chart	1	1559	.....	26 40	.....	.....
Small Chart Screws	3	484	Gold	36	.....	.....
Spider Agate Caps	2	4	"	5 21	.....	.....
" " " Ret. Screws	4	R698	"	40½	.....	.....
Base Agate Caps	2	5	"	5 19	.....	.....
" " " Ret Screws	4	R698	"	40½	.....	.....
Lever Pivot Thrust	4	941	Semi	58	.....	.....
Pendulum Shot Box Lead	..	.....	.....	67½	.....	.....
" " " Screw	1	184	Nickle White..	27¼	.....	.....
" Hook & Plate Assb	1	1008	Gold	5 68	.....	.....

Sheet 1—*Continued.*

1016, 988, 989.				620.	621.	622.
Hook Spacing Collar	1	374	Semi	19¾	.....	.....
Clevis Pin	2	54	"	06	.....	.....
Forked Indicator Sprayed	1	948	Sprayed	3 09¼	.....	.....
Hand Washer	1	155	Semi	10	.....	.....
" " ret. Screws	2	R698	"	20¼	.....	.....
Price Ind. Thrust Plate Rivet	2	2636	"	04½	.....	.....
Connecting Link Pro. Cap	1	230	Gold	3 39	.....	.....
" " " " Ret. Screw	1	R679	Semi	15¼	.....	.....
" " Pin Ret. Clip	2	89	"	47	.....	.....
" " "	2	88	"	14	.....	.....
Connecting Link	1	715	"	87¾	.....	.....
Leveling Leg	1	976	Gold	6 91	.....	.....
" Bar Retainers	2	664	Semi	16½	.....	.....
" " Ret. Screw	2	R698	"	20¼	.....	.....
Stand Leg	2	965	Gold	11 56	.....	.....
" " Ret. Screws	2	R676	Semi	34½	.....	.....
" " " " washers	2	R430	"	10¾	.....	.....
Carried Forward	..	.....	.....	556 41¾	602 12	628 86½

620-621-622 Scale "Gold."

Sheet 2.

Offered But Not Admitted.

				620.	621.	622.
Brought Forward	..	.....	.....	556 41¾	602 12	628 86½
Housing Locating Dowel Pin	2	423	Semi	11	.....	.....
Leveling Screw	1	974	Gold	2 21¼	.....	.....
" " Lock Nut	1	663	Semi	12	.....	.....
" " Wrench	1	714	"	56	.....	.....
" Foot Coil	1	390	"	38¼	.....	.....
Shift Post	1	442	Zinc	1 78	.....	.....
" " Washer	2	1208	Gold	51¼	.....	.....
" " Locking Pin	1	1640	Semi	04¼	.....	....
" " Adjusting Nut	1	726	Gold	1 60	.....	.....
" " Locking "	1	727	"	1 95¾	.....	.....
Housing Opening Cover	1	699	"	4 97½	.....	.....
" " " Ret. Screw	1	R698	"	10½	.....	.....
Spider Shot Box Weight	1	309	Semi	1 72¼	.....	.....
" " " Lead	..	.....	.....	91	.....	.....
Ft. & Bk. Housing Scrolls	2	1482	Gold	22 33	.....	.....
" " " " " Glass	2	749	.....	7 23½	.....	.....
Chart Glass Felt	15	.....	.....	15	.....	.....
Front Housing Scroll Ret. Screws	4	R622	Gold	72	.....	.....
Back " " " "	4	R622	"	72	.....	.....
Lower Housing Scroll	2	787	"	13 65	.....	.....
" " Glass	2	788	.....	1 95½	.....	.....
" " " Ret. Clip	4	2788	Semi	31	.....	.....

Sheet 2—*Continued.*

					620.	621.	622.
Back Lower Housing Scroll Ret. Screws	2	R605	Gold	.....	38½	.....	.....
Front Lower " " Thumb Screws	2	661	"	.....	87	.....	.....
Lower Housing Glass Ret. Clip Ret. Screws	4	R620	"	.....	42½	.....	.....
Lever Dust Shield	1	30	"	.....	3 02½	.....	.....
" " " Ret. Screws	2	R698	"	.....	21	.....	.....
Housing Agate Cover	2	454	"	.....	6 18½	.....	.....
" " " Ret. Screws	4	R610	"	.....	67	.....	.....
Dash Pot Oil	4	Gal. @ .40	.....		16	.....	.....
Reflector Hole Screw	1	R613	Gold	.....	44½	.....	.....
Patent Plate	1	914	"	.....	2 05	.....	.....
" " Ret. Screws	2	R697	"	.....	17½	.....	.....
Upper Pendulum Bumper	1	78	Semi	.....	33⅜	.....	.....
Lower " "	1	76	"	.....	39⅜	.....	.....
Lever Shipping Pin—Short	1	360	"	.....	28½	.....	.....
" " " —Long	1	417	"	.....	1 18¾	.....	.....
Housing Protector Plate	1	2841	Gold	.....	2 05¼	.....	.....
Carried Forward	..	.....		.....	639 33¼	685 03½	711 78

620-621-622 Scale "Gold."

Sheet 3.

Offered But Not Admitted.

				620.	621.	622.
Brought Forward	..	.....	.....	639 33¼	685 03½	711 78
Small Chart Screws	2	484	Gold	24	.....	.....
Sealing Pin Long	2	713	Semi	2 48½	.....	.....
Chart Protector	1	13116	"	35¼	.....	.....
Shipping Pin Washer	1	1139	"	02⅜	.....	.....
" " Ret. Cotter Pin	1	512	.....	02⅛	.....	.....
Shipping Tag	1	Form 80	.....	06	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Leveling Screw Wrench Envelope	1	Form 68	.....	21¾	.....	.....
Inspection Sheet	1	Form 32	.....	19	.....	.....
18—Clean Dash Pots	..	.....	.....	1 40	.....	.....
19—Assemble Scale	..	.....	.....	8 00	.....	.....
23—Line Hand & Chart	..	.....	.....	12 00	.....	.....
20—Balance Scale	..	.....	.....	26 00	.....	.....
37—Scrolling Scale	..	.....	.....	14 00	.....	.....
16—Wash & Clean Scale	..	.....	.....	4 50	.....	.....
First Inspection	..	.....	.....	16 00	.....	.....
Final Inspection	..	.....	.....	8 00	.....	.....
Scale Inspected	..	.....	.....	733 01½	778 71¾	805 46¼
Reflector Assb. Complete	1	603	Gold	34 64¼	.....	.....
Scale with Reflector	..	.....	.....	767 65¾	813 36	840 10½

620-621-622 Scale "Gold."

828 "The No. 27 type fan scale was the largest size of fan scale, designed for use by grocers and was equipped with a pan. The No. 28 was the same scale but equipped with a platter and the 29 was the same scale equipped with a scoop. These scales were substantially the same as the style No. 453, and 454 and 455, respectively, the only difference being in the earlier scales, styles No. 27, 28 and 29, the pendulum capacity was increased by manual means, and in the later scales Nos. 453, 454 and 455 it was done by means of a lever. The difference in cost would be very slight—say none at all.

"I have before me the cost sheets showing the cost of the No. 453 style of scale.

"Mr. Meads: We have already offered that."

"The No. 30 scale was a fan type scale designed for butchers and it had a special chart and price range to suit the butcher trade. It was the same size and practically the same in cost as the No. 453 scale. This No. 30 scale and the scales style Nos. 31 to 45 and 50 and 59, inclusive all fan scales we have no costs for; they resemble the scale style Nos. 453, 454 and 455. The cost would be the same. They are all alike except possibly a change in chart and price range. No. 56 was the same size as 453, excepting it had a 20 pound chart instead of 10, and had a 10 pound tare beam.

The fan scales, style Nos. 60, 61 and 62 were small sized fan scales containing a three-pound chart for delicatessen or candy stores and equipped with pan, platter and scoop, respectively. The cost of the same would be practically the same as the Nos. 620, 621 and 622. The scales with the style Nos. 63, 64, 65, 66, 67, 68, 69, 70, 71, and 72 were also the same size—what we call our 23 size—and their manufacturing cost would be substantially the same as these scales, 620, 621 and 622. These scales differ from the 620 style only in the capacity of the charts and different price ranges. We have no cost sheets for 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 & 72. The scale No. 72 was the same as No. 17, except the chart. The 620, 621, & 622 most nearly resembled these scales.

"I have a record of the costs of the scales style Nos. 620, 621 and 622."

(Witness here turns to pages containing costs of Nos. 620, 621 and 622.)

829 "The scale No. 75 was a fan type scale of the larger size, designed particularly for grocers' use and having a ten or twenty pound chart and a ten or twenty pound tare beam. The No. 76 scale was the same as the No. 75, but equipped with a platter, and the No. 77 was the same scale but equipped with a scoop. The No. 78, 79 and 80 were the same as the 75, 76 and 77, but with an increased capacity in the charts. We have no cost records for them. These scales would cost approximately the same as the scales style Nos. 453, 454 and 455, for which I have separate cost records.

"The style No. 101 scale was a candy scale; small-sized fan, and equipped with a scoop. We made many style numbers of this fan

scale, running from Nos. 101 to 109, inclusive—the difference between these scales being the slight differences in the capacity of the chart or the price ranges, and the fact that one might be equipped with a fan, another with a platter and a third with the scoop. Of them we have no cost records. The cost of these scales was substantially the same and would be approximately the same as the cost of the style Nos. 403, 404 and 405, for which I have separate cost records here.

"The No. 110 style of scale was a small size scale for candy and delicatessen purposes, equipped with a pan, and No. 111 was the same scale equipped with a platter, and No. 112 is the same scale equipped with a scoop. These scales were approximately the same as the scales Nos. 413, 414 and 415 and, in my opinion, would cost practically the same to manufacture.

"The scales numbered 113, 114 and 115 were the middle size fan type scale, five-pound charts capacity, and distinguished with a pan, platter and scoop, respectively. The scales numbered 116, 117 and 118 were the same scales similarly equipped, but with a different chart. These scales would be substantially the same in cost of manufacture as the scales numbered 423, 424 and 425, for which I have separate cost sheets. We have no separate cost sheets for 110 to 118, inclusive.

Then testimony as follows:

Q. Have you before you any cost sheets showing the factory costs of the scales 423, 424 and 425?

A. I think I have. I have them here. (Referring to pages containing cost sheets.)

830 Q. When were those cost sheets made?

A. November 16th, 1913.

Q. During the time when you were manufacturing the scales 423, 424 and 425?

A. Yes.

Q. Under whose supervision?

A. Mine.

Q. Of how many pages do they consist?

A. Four pages.

Mr. Meads: I offer in evidence, if the court please, the factory costs of the scale known as 423, consisting of four pages identified by the witness, and ask that they be marked Defendant's Exhibit 32, four sheets.

Mr. Zane: Same objection.

The Master: Objection sustained.

(Said four sheets being the estimated cost sheets of the 423 scale, so offered, but not received in evidence, marked for identification Defendant's Exhibit 32, sheets 1, 2, 3 and 4 respectively, offered but not admitted.)

Sheet 1.

Offered But Not Admitted.

223, 234, 235.				423.	424.	425.
Pan-Platter-Scoop	1	.....	.....	39 41½	60 00	110 22½
1016, 988, 989.						
Pan-Platter-Scoop	1	.....	Gold	36 34¾	58 49½	37 42½
Shot Box Weights	..	.....	.....	25	.....	.....
Spider Agate Caps	2	4	"	5 21	.....	.....
¼ x 8/32 R. H. Brass Mach. Screw	4	R610	"	67	.....	.....
Lever & Tare Beam Assemb	1	255–22	"	127 58½	130 55½	127 58½
Base Agate Caps	2	5	"	5 19	.....	.....
¼ x 8/32 R. H. Brass Mach. Screws	4	R610	"	67	.....	.....
Lever Pivot Thrusts	4	941	Semi	58	.....	.....
Connecting Link	1	715	"	87¾	.....	.....
Connecting Link Pins	2	88	"	14	.....	.....
Connecting Link Pins ret. Clips	2	89	"	47	.....	.....
Base Lug	1	124	"	1 42	.....	.....
Base Lug Adjusting Screws	2	366	"	25½	.....	.....
⅝" x 12/24 R. H. Iron Mach. Screw	1	R676	"	17¼	.....	.....
Lever Dust Shield	1	30	Gold	3 02½	.....	.....
¼" x 8/32 R. R. Brass Mach. Screw	2	R610	"	33½	.....	.....
Base	1	2504	"	99 12¾	.....	.....
Patent Plate	1	914	"	2 05	.....	.....
3/16" x 4/36 R. H. Iron Mach. Screws	2	R697	"	17½	.....	.....
Dash Pot Assemb	1	2623	.....	17 46	.....	.....

¼ x 8/32 R. H. Iron Mach. Screws	2	R698	Semi	20¼	.....	.....	
Leveling Screw	1	566	Gold	3 81½	.....	.....	
Leveling Screw Washer	1	564	"	05½	.....	.....	
Leveling Screw Lock Nut	1	663	Semi	12	.....	.....	
Leveling Bar	1	591	"	2 03¾	.....	.....	
Leveling Bar Retainers	2	664	"	16½	.....	.....	
¼" x 14/20 R. H. Iron Mach. Screws	2	R698	"	20¼	.....	.....	
Sub-base	1	561	Gold	28 37	.....	.....	
Sub base feet	4	63	.....	3 80	.....	.....	
1½" x 14/20 R. H. Iron Mach. Screw	1	R700	Semi	60	.....	.....	
Housing	1	2502	Gold	145 72¼	.....	.....	
⅝" x 12/24 R. H. Iron Mach. Screw	4	R676	Semi	34½	.....	.....	
¼" x ¾ Iron Washer	4	R430	"	31½	.....	.....	
Dowel Pins	2	423	"	11	.....	.....	
Lower Housing Scroll with Hood	1	2821	Gold	8 07¼	.....	.....	
Lower Housing Scroll with Thumb Screws	2	661	"	87	.....	.....	
Carried Forward	..	.....	.....	536 12¾	581 83	608 01½	

423 "A" Scale "Gold."

DEF. EX. 32.

Sheet 2.

Offered But Not Admitted.

					423.	424.	425.
	Brought Forward	..	.....	.....	536 12¾	581 83	608 01½
	Lower Housing Scroll without Hood	1	2726	Gold	5 98¼	.....	.....
	⅜" x 8/32 R. H. Brass Mach. Screws	2	R605	"	33½	.....	.....
	Lower Housing Glass	2	2727	.....	13 00	.....	.....
	Glass Retaining Clips	4	2788	Gold	31	.....	.....
	¼" x 2/56 R. H. Brass Mach. Screws	4	R620	"	42½	.....	.....
	Housing Opening Cover	1	2560	"	4 80	.....	.....
	¼" x 8/32 R. H. Brass Mach. Screw	1	R610	"	16¾	.....	.....
	Back Housing Shield	1	2503	"	5 23¾	.....	.....
	¼" x 8/32 R. H. Brass Mach. Screw	2	R610	"	33½	.....	.....
832	Front Housing Shield	1	2525	"	5 38	.....	.....
	½" x 8/32 R. H. Iron Mach. Screw	2	R687	"	50½	.....	.....
	Pendulum Operating Knob	1	8	"	3 70½	.....	.....
	Pendulum Operating Knob Set Screw	1	2534	"	09¾	.....	.....
	Front Housing Scroll	1	2816	"	10 92½	.....	.....
	5/16" x 8/32 R. H. Brass Mach. Screws	4	R622	"	72	.....	.....
	Front Chart Glass	1	748	.....	4 82¼	.....	.....
	Back Housing Scroll	1	408	"	10 32	.....	.....
	5/16" x 8/32 R. H. Brass Mach. Screws	3	R622	"	54	.....	.....
	Back Chart Glass	1	750	.....	2 01½	.....	.....
	Chart Glass Felts	8	1009	.....	08	.....	.....
	Housing Opening Plate	1	2512	"	5 81¾	.....	.....
	Flash Opening Scroll	1	430	"	2 15½	.....	.....

¼" x 8/32 R. H. Brass Mach. Screw	2	R610	"	3½	.....	.....
Flash Opening Glass	1	753	.....	20	.....	.....
Glass Retaining Clips	2	2788	"	31	.....	.....
¼" x 2/56 F. H. Iron Mach. Screw	2	R670	Semi	06½	.....	.....
Chart	1	123	.....	42 00	.....	.....
Housing Protector Plate	1	2841	Gold	1 99	.....	.....
Housing Protector Plate ret. Screws	2	484	"	24	.....	.....
Small Chart Screws	4	484	"	48	.....	.....
Split Washers	4	330	Semi	18½	.....	.....
Large Chart Screws	2	24	Gold	58¼	.....	.....
Upper Pendulum Bumper	1	78	.....	33½	.....	.....
Race Plate	2	2608	.....	8 54½	.....	.....
Race Locating Pin & Screw Assemb.	2	2564	.....	92	.....	.....
Race Plate Locating Screw	2	2562	.....	45½	.....	.....
Race Spacing Tube	1	2565	.....	64¾	.....	.....
Race Spacing Tube & Lower Pend. Bumper	1	2638	.....	1 93¾	.....	.....
Carried Forward	..	.....	.....	673 08	718 78¼	744 96½

423 "A" Scale "Gold."

DEF. Ex. 32.

Sheet 3.

Offered But Not Admitted.

				423.	424.	425.
Brought Forward	..	.....	.....	673 08	718 78¼	744 96½
Pendulum Pivot Retainer	1	2514	Semi	1 12½	.....	.....
Pendulum Pivot Retainer Screw	1	2568	Gold	16¼	.....	.....
Pendulum Pivot Retainer Pin	1	2589	Semi	04	.....	.....
Pendulum Thrust Plate Assemb	1	2571	.....	1 09¼	.....	.....
⅜" x 8/32 R. H. Iron Mach. Screw	2	R680	Semi	22¼	.....	.....
Flash Sign Assemb. & Printed	1	2620	.....	4 13½	.....	.....
Flash Sign Shoulder Screw	1	429	.....	23¼	.....	.....
Carrier Arm Assemb. Complete	1	2605	.....	29 67¾	.....	.....
Carrier Arm Extension	1	582	Nickle	2 19	.....	.....
¼" x 8/32 R. H. Iron Mach. Screw	1	R698	"	11	.....	.....
Carrier Arm Stud Plate Screws	3	993	.....	40½	.....	.....
Pendulum Assemb. Complete	1	2666	.....	69 66¼	.....	.....
Hook & Plate Assemb	1	1007	Gold	5 97	.....	.....
Hook Spacing Collar	1	374	.....	19¾	.....	.....
Clevis Pin	1	54	.....	03	.....	.....
Ft. & Bk. Hand Assemb	1	2618	.....	19 86¼	.....	.....
Clevis Pins	2	54	.....	06	.....	.....
⅜" x 8/32 R. H. Iron Mach. Screw	1	R680	Semi	22¼	.....	.....
Hand Washer	1	2646	.....	11½	.....	.....
Clevis Bushing	1	557	.....	54¼	.....	.....

833	Clevis Pin Assemb	1	711	Gold	27½	.....	.....
	Shipping Pin—Long	1	596	.....	1 21¾	.....	.....
	Shipping Pin Washer	1	1139	.....	02¾	.....	.....
	Cotter Pin	1	512	.....	02⅛	.....	.....
	Shipping Pin—Short	1	360	.....	28½	.....	.....
	Shipping Tag	1	Form 80	80	06	.....	.....
	Workman's Slip	1	Form 19	19	19¼	.....	.....
	Inspection Sheet	1	Form 32	32	19	.....	.....
	Chart Protector	1	13116	.....	35¼	.....	.....
	.4 Gal. Dash Pot Oil	..	.....	.....	16	.....	.....
	Carried Forward	..	.....	.....	811 91¼	857 61½	883 80

423 "A" Scale "Gold."

DEF. Ex. 32.

Sheet 4.

Offered But Not Admitted.

				423.	424.	425.
Brought Forward	..	.....	.....	811 91¼	857 61½	883 80
19—Assemble	..	.....	.....	12 00	.....	.....
21—Fitting Automatic Flash Arms	..	.....	.....	8 00	.....	.....
22—Fitting Race & Operating Knob	..	.....	.....	14 00	.....	.....
18—Clean Dash Pot	..	.....	.....	1 40	.....	.....
24—Line Hands	..	.....	.....	16 00	.....	.....
27—Scrolling	..	.....	.....	14 00	.....	.....
25—Balancing	..	.....	.....	30 00	.....	.....
26—Wash & Clean	..	.....	.....	4 50	.....	.....
First Inspection	..	.....	.....	20 00	.....	.....
Final Inspection	..	.....	.....	10 00	.....	.....
Scale Inspected	..	.....	.....	941 81¼	987 51½	1,013 70
Reflector Assemb. Complete	1	603	.....	32 59¼	.....	.....
Scale with Reflector	..	.....	.....	974 40½	1,020 10¾	1,046 29¼

423 "A" Scale "Gold."

834 "The scales known as style Nos. 120, 121 and 122 were middle-sized fan scales with five pound charts and tare beams, and equipped with pan, platter and scoop respectively. The scales Nos. 123, 124, and 125 were the same scales, respectively, but equipped with a different chart. The scales numbered 126, 127 and 128 were also the same size scales, similarly designed with pan, platter and scoop, but designed with special charts. These scales would be practically the same in cost of manufacture as the scales numbered 620, 621 and 622, for which we have separate cost records. We have no cost records for 120 to 128, inclusive.

"The No. 131 scale was a special, large-size fan scale for butchers, having ten and twenty pound chart and a ten pound tare beam, and also equipped with a pan. The No. 132 was the same scale equipped with platter and the No. 133 was the same scale equipped with a scoop. The scales Nos. 143 to 158, inclusive, were all large-size fan scales, differing among themselves in that they were equipped with different capacity charts and with different price ranges. These scales would be substantially the same in cost of manufacture as the scales numbered 453, 454 and 455, for which we have separate cost records. We have no cost records for 131, 132, 133 or for 143 to 158, inclusive.

"The No. 137 scale was a middle-size scale equipped with a pan, and having a special five-pound chart. The No. 138 was the same scale equipped with a platter, and the No. 139 was the same scale equipped with a scoop. These scales would be substantially the same as the Nos. 620, 621 and 622, for which we have separate cost sheets. For 137, 138, 139 we have no cost records.

"The No. 159 scale was a special scale of the large-size fan, and the Nos. 163, 164 and 165 were also large-size fan type scales equipped respectively with pan, platter and scoop and with a special chart. Similarly, the scales known as styles Nos. 173, 174 and 175 were large size fan scales with a special chart of different capacity and equipped respectively with pan, platter and scoop. The cost of manufacture of these scales would be practically the same as that of the scales Nos. 453, 454 and 455, for which we have separate cost records. We have no cost records for 159, 163, 164, 165, 173, 174 & 175.

835 "The Nos. 210, 211 and 212 scales were small size fan scales with the double chart—three and six pound charts, with automatic means for changing the pendulum capacity, and equipped respectively with pan, platter and scoop. These scales would be practically the same in cost of manufacture as the scales Nos. 413, 414 and 415, for which we have separate cost sheets. We have no cost sheets for 210, 211 and 212.

"The scales numbered 223 to 228 respectively, were middle size scales with the double chart—four and eight pounds, with automatic means for changing the pendulum capacity—and equipped with pan, platter, and scoop, respectively. These scales would be substantially the same in cost of manufacture as the scales Nos. 423, 424 and 425, for which we have separate cost records. We have no cost sheets for 223 to 228, inclusive.

"The scales numbered 243 to 248, 253 to 258, 263 to 268, and 273 to 278, inclusive, were all fan type scales of the large size and equipped with the double chart—ten and twenty pounds charts with automatic means for changing the pendulum capacity, and differing among themselves in that they had charts of different price ranges, and equipped with pan, platter and scoop, respectively. The cost of manufacture of these scales would be practically the same as the cost of the Nos. 453, 454 and 455, for which we have separate cost records. We have no cost records for 243 to 248, 253 to 258, 263 to 268, 273-278 inc.

"The scale known as style No. 434 was a special scale of the 23 size, equipped with four and eight pound chart, and was practically the same in cost of manufacture as the scale No. 424.

"The scales known as style Nos. 503, 504 and 505 were our smallest size fan type scales, designed particularly for candy scales and equipped with pan, platter and scoop respectively. They were only made in the blue finish. We have separate cost sheets showing the cost of these scales."

Then testimony as follows:

Q. Have you those cost sheets with you?

A. Yes.

Q. Will you turn to them?

A. (Witness turns to pages containing cost sheets.

Q. What are they called at the foot.

A. 503, 504, 505. "Chart scale in blue finish."

Q. Under whose supervision were those made?

836 A. Mine.

Q. Where?

A. Toledo, at my office.

Q. Made during the time you were building the scales, 503, 504 and 505?

A. Yes.

Q. Concurrently with the building of those scales?

A. Yes.

Mr. Meads: I offer in evidence, if the court please, the instruments identified by the witness being the cost sheets showing the factory costs of scales 503, 504 and 505.

Q. Consisting of two sheets?

A. Consisting of four pages of two different constructions of chart, A chart and B chart.

Mr. Meads: And I ask that they be marked Defendant's Exhibit 33, the four sheets.

Mr. Zane: We make the same objection.

The Master: Objection sustained.

(Said pages containing estimated cost of scales 503, 504 and 505, so offered, but not received in evidence, marked for identification Defendant's Exhibit 33, sheets 1, 2 and 4 respectively, offered, but not admitted.)

Sheet 1.

Offered But Not Admitted.

					503.	504.	505.
	..	2104	Gold		.....	.....	.....
Pan-Platter-Scoop	1	2019	.....		27 29¾	14 00	103 79½
	..	2140	Gold		.....	.....	.....
2123, 2124, 2089.							
Pan-Platter-Scoop Spider.....	1	.....	Gold		3 23¼	3 23¾	5 87¼
Spider Retaining Screws.....	2	R697	"		18½	.....	.....
Plunger Regulating Cap.....	1	2062	.....		5 20½	.....	.....
Patent Plate.....	1	2111	Gold.....		1 43	.....	.....
Patent Plate retaining screws.....	2	R697	"		18½	.....	.....
Housing Opening Plate.....	1	2072	Blue		7 07¾	.....	.....
Housing Opening Plate retaining screws.....	2	R705	Gold		19½	.....	.....
Front Housing Scroll.....	1	2067	"		10 55	.....	.....
Front Housing Scroll retaining screws.....	4	R705	"		39	.....	.....
Front Housing Scroll Glass.....	1	2069	.....		2 75	.....	.....
Back Housing Scroll.....	1	2068	.....		6 55	.....	.....
Back Housing Scroll retaining screws.....	3	R697	Gold		27¾	.....	.....
Back Housing Glass.....	1	2070	.....		1 50	.....	.....
Shift Opening Cover.....	1	2148	Gold		1 93½	.....	.....
Shift Opening Cover retaining screws.....	2	484	"		34	.....	.....
"A" Pendulum Assb. Complete.....	1	2101	"		35 51¼	.....	.....
False Bottom.....	1	2074	.....		2 07	.....	.....
False Bottom retaining screws.....	1	R698	Semi		10	.....	.....

Sheet 1—*Continued.*

				503.	504.	505.
Pendulum Bumper Assb	1	2103	.....	64	.....	.....
Pendulum Bumper retaining screws	2	R697	Semi	17	.....	.....
Chart	1	107	.....	38 02	.....	.....
Chart Screws	4	484	Gold	68	.....	.....
Chart Screws Counterbalance Washers	2	330	"	09½	.....	.....
Housing Agate Bridge Assb	1	2093	.....	12 17½	.....	.....
Housing Agate Bridge retaining screws	2	R683	Semi	22	.....	.....
Check Riser Assb	1	2105	.....	4 23¾	.....	.....
Check Riser retaining screws	1	R680	Semi	11	.....	.....
Connecting Link Pin	1	2113	.....	13¼	.....	.....
Shift Lug	1	2154	.....	02¼	.....	.....
Shift Lug Screw	1	2020	.....	11¾	.....	.....
Shift Lug Adj. Screw	2	R711	Semi	20	.....	.....
Leveling Screw Assb	..	2090	.....	2 89	.....	.....
Leveling Screw Washers	1	564	.....	05½	.....	.....
Leveling Screw Feet	1	2109	.....	38½	.....	.....
Leveling Screw Rubber	1	.....	.....	04	.....	.....
Base	1	2090	Blue	39 26	.....	.....
Housing	1	2114	"	58 77¾	.....	.....
Base to housing screws	3	R680	Semi	33	.....	.....
Carried Forward	..	.....	.....	266 04	252 74¾	345 17¾

503-504-505 "A" Scale "Blue."

Sheet 2.

Offered But Not Admitted.

				503.	504.	505.
Brought Forward	..	.....	.....	266 04	252 74¾	345 17¾
Base Plate Assb	1	2126	.....	100 98¾	.....	.....
Base Plate retaining screws	4	R698	Semi	40	.....	.....
.31 Gal. Dash Pot Oil	..	.....	.....	12½	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Shipping Tag	1	" 80	.....	06	.....	.....
25 yards Cheese Cloth	..	.....	.....	72	.....	.....
Assemble Complete	..	.....	.....	26 00	.....	.....
Wash & Clean	..	.....	.....	1 50	.....	.....
Final Inspection	..	.....	.....	7 50	.....	.....
Scale Inspected	..	.....	.....	403 52½	390 23¼	482 66¼
Reflector Assb	1	2022	Blue	27 23¼	.....	.....
Reflector retaining screw	1	R682	Gold	12¼	.....	.....
Scale with reflector	..	.....	.....	430 88	417 58¾	510 01¾
Scale with reflector packed for shipment	..	.....	.....	464 50¾	451 21½	543 64½
Scale with reflector & 3 packed for shipment	..	.....	.....	508 65	495 35¾	587 78¾
Scale with reflector & 5 packed for shipment	..	.....	.....	509 78½	496 49¼	588 92¼

503-504-505 "A" Scale "Blue."

DEF. EX. 33.

Sheet 3.

Offered But Not Admitted.

					503.	504.	505.
	..	2104	Gold.		.....	.....	.....
Pan-Platter-Scoop	1	2019	.....		.....	.....	.....
	..	2140	Gold		27 29¾	14 00	103 79½
2123, 2124, 2089 Spider.....	1	.....	Gold		3 23¼	3 23¾	5 87¼
Spider Retaining Screws.....	1	R697	"		18½	.....	.....
Plunger Regulating Cap.....	1	2062	.....		5 20½	.....	.....
Patent Plate.....	1	2111	Gold		1 43	.....	.....
Patent Plate retaining screws.....	2	R697	"		18½	.....	.....
Housing Opening Plate.....	1	2072	Blue		7 07¾	.....	.....
Housing Opening Plate retaining screws.....	2	R705	Gold		19½	.....	.....
Front Housing Scroll.....	1	2067	"		10 35	.....	.....
Front Housing Scroll retaining screws.....	4	R705	"		39	.....	.....
Front Housing Glass.....	1	2069	.....		2 75	.....	.....
Back Housing Scroll.....	1	2068	Gold		6 55	.....	.....
Bock Housing Scroll retaining screws.....	3	R697	"		27¼	.....	.....
Back Housing Glass.....	1	2070	.....		1 50	.....	.....
Shift Opening Cover.....	1	2148	Gold		1 93½	.....	.....
Shift Opening Cover retaining screws.....	2	484	"		34	.....	.....
"B" Pendulum Assb. Complete.....	1	2118	.....		36 31	.....	.....
False Bottom.....	1	2074	.....		2 07	.....	.....
False Bottom retaining screws.....	1	R698	.....		10	.....	.....
Pendulum Bumper Assb.....	1	2103	.....		64	.....	.....

Sheet 3—*Continued.*

				503.	504.	505.
Pendulum Bumper retaining screws	2	R697	Semi	17	.....	.....
"B" Chart	1	104	.....	26 62	.....	.....
S39 Chart Screws	4	484	Gold	68	.....	.....
Chart Screws Counterbalance Washers	2	330	"	09½	.....	.....
Housing Agate Bridge Assb	1	2093	.....	12 17½	.....	.....
Housing Agate Bridge retaining screws	2	R683	Semi	22	.....	.....
Check Riser Assb	1	2105	.....	4 23¾	.....	.....
Check Riser retaining screws	1	R680	Semi	11	.....	.....
Connecting Link Pin	1	2113	.....	13¼	.....	.....
Shift Lug	1	2154	.....	92¼	.....	.....
Shift Lug Screw	1	2020	.....	11¾	.....	.....
Shift Lug Adj. Screw	2	R711	Semi	20	.....	.....
Leveling Screw Assb	1	2090	.....	2 89	.....	.....
Leveling Screw Washers	1	564	.....	05½	.....	.....
Leveling Screw Feet	1	2109	.....	38½	.....	.....
Leveling Screw Rubber	1	.....	.....	04	.....	.....
Base	1	2000	Blue	39 26	.....	.....
Housing	1	2114	"	58 77¾	.....	.....
Base to housing screws	3	R680	Semi	33	.....	.....
Carried Forward	..	.....	.....	255 43¾	242 15½	334 57½

503-504-505 "B" Scale "Blue."

DEF. Ex. 33.

Sheet 4.

Offered But Not Admitted.

				503.	504.	505.
Brought Forward	..	.....	.....	255 43¾	242 15½	334 57½
Base Plate Assb	1	2126	.....	100 98¾	.....	.....
Base Plate retaining screws	4	R698	Semi	4 04	.....	.....
.31 Gal. Dash Pot Oil	..	.....	.....	12½	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Shipping Tag	1	" 80	.....	06	.....	.....
25 yards Cheese Cloth	..	.....	.....	72	.....	.....
Assemble Complete	..	.....	.....	26 00	.....	.....
Wash & Clean	..	.....	.....	1 50	.....	.....
Final Inspection	..	.....	.....	7 50	.....	.....
Scale Inspected	..	.....	.....	392 92¼	379 64	472 06
Reflector Assembled	1	2022	Blue	27 23¼	.....	.....
Reflector retaining screw	1	R682	Gold	12¼	.....	.....
Scale with reflector	..	.....	.....	420 27¾	406 99½	499 41½
Scale with reflector packed for shipment	..	.....	.....	453 90½	440 62¼	533 04¼
Scale with reflector & 3 packed for shipment	..	.....	.....	498 04¾	484 76½	577 18½
Scale with reflector & 5 packed for shipment	.....	.....	..	.....		

..... 499 18¼ 495 90 578 32 503-504-505 "B" Scale "Blue."

840 The Master: It appears I assume that these are pages in the same book to which reference has already been made.

Mr. Zane: The same book, yes sir.

Mr. Meads: These, of course, are scales, if the court please, about which the witness Bowman was examined, these particular scales.

The Master: I understand that.

"The scales known as style Nos. 513, 514 and 515 were the small size fan scales—the No. 10 size—with a three pound chart, and equipped with pan, platter and scoop respectively.

Similarly, the scales known as style Nos. 523, 524 and 525 are scales of this type with a different chart and equipped respectively with pan, platter and scoop. These scales are substantially the same in cost of manufacturing as the scales Nos. 620, 621, and 622, for which we have separate cost records but we have no cost records for 513, 514, 515, 523, 524, 525.

The scales known as styles Nos. 556, 557 and 558 were the large size fan scales—the 53 size—and equipped with pan, platter and scoop. The 567, the best information we could get, was a special scale of some type, 53 size, and most closely resembled the 453. The cost of manufacture of these scales would be substantially the same as that of the scales, styles, Nos. 453, for which we have separate cost records. We have no cost records for 556, 557, 558, 567.

"The scales known as style Nos. 603, 604 and 605 are fan scales of our smallest type, made with a weighing chart only—that is, they are not equipped with a computing chart—and respectively equipped with pan, platter and scoop.

Then testimony as follows:

Q. Have you cost records showing the cost of 603, 604 and 605?

A. Yes, sir.

Q. Have you such cost records before you?

A. Yes.

Q. Under whose supervision were they made?

A. Under mine.

Q. Will you turn to the cost records showing the cost of 603, 604 and 605?

A. I have them here.

841 Q. Of how many pages do they consist?

A. Two.

Q. When were those cost records made, Mr. Reeves; were they made during the time you were building 603, 604 and 605?

A. They were made at the time we were building those scales.

Q. Concurrently with the building of such scales?

A. Yes.

Mr. Meads: I offer in evidence, if the court please, the cost records showing the cost of the 603, 604 and 605 scales as identified by the witness and consisting of two pages and ask that they be marked Defendant's Exhibit 34.

Mr. Zane: Same objection.
The Master: Objection sustained.

(Said two sheets containing estimated cost of scales 603, 604 and 605, so offered but not received in evidence, marked for identification Defendant's Exhibit 34, sheets 1 and 2 respectively, offered but not admitted.)

Sheet 1.

Offered But Not Admitted.

				603.	604.	605.
	..	2104	Gold	.....	.....	.....
Pan-Platter-Scoop	1	2019	.....	27 29¾	14 00	103 79½
	..	2140	.....	.....	.....	.....
2123, 2124, 2089 Spider.....	1	.....	Gold	3 23¼	3 23¼	5 87¼
Spider Retaining Screws.....	2	R697	"	18½	.....	.....
Plunger Regulating Cap.....	1	2062	.....	5 20½	.....	.....
Patent Plate.....	1	2111	Gold	1 43	.....	.....
Patent Plate retaining screws.....	2	R697	"	18½	.....	.....
Front Chart Plate.....	1	2146	"	20 33¾	.....	.....
Front Chart Plate retaining screws.....	4	R705	"	39	.....	.....
Back Housing Scroll.....	1	2116	"	5 35¾	.....	.....
Back Housing Scroll retaining screws.....	3	R675	"	27¾	.....	.....
Back Housing Glass.....	2	2070	.....	3 00	.....	.....
Front Indicator Glass Retainer (Flat).....	2	823	.....	42½	.....	.....
Front Indicator Glass Retainer retaining screws.....	2	R697	Semi	17	.....	.....
Chart	1	1538	.....	17 71½	.....	.....
Chart Screws.....	2	484	Gold	34	.....	.....
Shift Opening Cover.....	1	2148	"	1 93½	.....	.....
Shift Opening Cover retaining screws.....	2	484	"	34	.....	.....
Pendulum Assembled.....	1	2151	.....	39 28	.....	.....
False Bottom.....	1	2074	.....	2 07	.....	.....
False Bottom retaining screws.....	1	R698	.....	10	.....	.....

Sheet 1—*Continued.*

				603.	604.	605.
Pendulum Bumper Assb	1	2103	.....	64	.....	.....
Pendulum Bumper, retaining screws	2	R697	Semi	17	.....	.....
Housing Agate Bridge Assb	1	2093	.....	12 17½	.....	.....
Housing Agate Bridge retaining screws	2	B683	Semi	22	.....	.....
Check Riser Assembled	1	2105	.....	4 23¾	.....	.....
Check Riser retaining screws	1	R680	Semi	11	.....	.....
Connecting Link Pin	1	2113	.....	13¼	.....	.....
Shift Lug	1	2154	.....	92¼	.....	.....
Shift Lug Screw	1	2020	.....	11¾	.....	.....
Shift Lug. Adj. Screw	2	R711	Semi	20	.....	.....
Leveling Screw Assb	1	2090	.....	2 89	.....	.....
Leveling Screw Washers	1	564	.....	05½	.....	.....
Leveling screw feet	1	2109	.....	38½	.....	.....
Leveling Screw Feet Rubber	1	.....	.....	04	.....	.....
Base	1	2090	Gold	39 26	.....	.....
Housing	1	2114	"	58 77¾	.....	.....
Base to housing screws	3	R680	Semi	33	.....	.....
Base Plate Assb	1	2126	.....	100 98¾	.....	.....
Base Plate retaining screws	4	R698	Semi	40	.....	.....
Carried Forward	..	.....	.....	351 32¼	338 03	430 46

603-604-605 Scale "Blue."

DEF. EX. 34.

Sheet 2.

Offered But Not Admitted.

				603.	604.	605.
Brought Forward	..	.....	.....	351 32¼	338 03	430 46
.31 Gal. Dash Pot Oil	..	.....	.....	12½	.....	.....
Workman's Slip	1	Form 19	.....	19¼	.....	.....
Shipping Tag	1	" 80	.....	06	.....	.....
25 yards Cheese Cloth	..	.....	.....	72	.....	.....
Assemble Complete	..	.....	.....	26 00	.....	.....
Wash & Clean	..	.....	.....	1 50	.....	.....
Final Inspection	..	.....	.....	7 50	.....	.....
Scale Inspected	..	.....	.....	387 42	374 12¾	466 55¾
Reflector Assembled	1	2022	Blue	27 23¼	.....	.....
Reflector retaining screw	1	R682	.....	12¼	.....	.....
Scale with reflector	..	.....	.....	414 77½	401 48¼	493 91¼
Scale with reflector packed for shipment	..	.....	.....	448 40¼	435 11	527 54
Scale with reflector & 3 pasked for shipment	..	.....	.....	483 72	470 42¾	562 85¾
Scale with reflector & 3 packed for shipment	..	.....	.....	484 93	471 63¾	564 06¾

603-604-605 Scale "Blue."

"The scales known as the style Nos. 613, 614 and 615 were a middle sized fan scale, equipped with a four pound chart and provided respectively with pan, platter and scoop. Similarly, the scales known as styles No. 623, 624 and 625, are scales of this same size, but equipped with a five pound chart and provided with a pan, platter and scoop respectively. The cost of manufacturing these scales would be substantially the same as the cost of the scales numbered 620, 621 and 622, for which we have separate cost records. We have no cost records of 613, 614, 615, 623, 624, 625.

"The scales known as style Nos. 653 to 658 inclusive, are the large size fan type scales—the No. 53 size—equipped with a ten pound chart and tare beam and differing among themselves because of the capacity of the tare beam and the provision of pan, platter or scoop.

"The cost of manufacture of these scales would be substantially the same as the cost of scales style Nos. 453, 454 and 455, for which we have separate cost records. We have no cost records of 653 to 658, inclusive.

Then testimony as follows:

Q. At the time that you furnished the information to the Treasurer's Department, Mr. Zolg's Department, at the time of the first accounting, did you have any other cost sheets than those which are now before you?

A. No.

844 Q. Are the cost sheets which are now before you in the same condition as they were then?

A. To the best of my knowledge they are.

Q. Were the data which you furnished Mr. Zolg derived from those cost sheets?

A. They were.

Q. In the manufacture of Fan and Cylinder Scales at Toledo where are such scales actually constructed?

A. They are constructed in the factory and are put together there.

Q. Is there any distinction between Fan and Cylinder as to the parts of the factory through which such parts go?

A. No, they are made in the same departments by the same men and many of the parts are interchangeable, one machine with another.

Q. Is there any of the stock that's interchangeable?

A. Yes.

Q. The same artisans work on the Fans as work on the Cylinders?

A. The same workmen.

Q. Is there any difference in the character of the material used between Fan and Cylinder Scales?

A. No. We get our castings from the same source of supply and we get our steel from the same source of supply, and all other materials for building the scales.

WILLIAM A. ZOLG, recalled for further examination, testified as follows:

Direct examination.

By Mr. Meads:

Q. Mr. Zolg, at the time that you prepared the first account submitted by you in this case in which you gave certain costs as the factory costs of Cylinder Scales, did you make any personal investigation or did you accept the figures given you by Mr. Reeves?

A. I accepted the figures given me by Mr. Reeves.

Q. You personally have no knowledge of such factory costs?

A. No, sir.

Mr. Meads: That is all.

845 Mr. Zane: What he stated is already in the record. I don't know that I care to cross examine.

* * * * * * *

Mr. Meads: On February 1st, as solicitor for the defendant in this case, I was served with notice to produce before the Master: (1) Receiving Record, (2) Cost Sheets Binder, (3) General Ledger, (4) Book of Inventory Balances, called Trial Balances at the hearing in this case; which instruments we have produced and have here in court.

* * * * * * *

Mr. Hibben: We now request the Master to fix a time and place in the City of Providence, Rhode Island, for the taking of testimony of certain witnesses at which time and place we offer to prove by witnesses residing in the State of Rhode Island that for a period of upwards of twenty years prior to the time the defendant herein began to make and sell automatic scales embodying a cylinder or drum, certain weighing and computing scales were extensively made at Pawtucket, Rhode Island, and were sold throughout the New England States, and that such scales were practical, successful and commercial scales.

That such scales were automatic weighing and computing scales and included a casing which enclosed a rotatable indicator drum consisting of spaced-apart skeleton frames or spiders made of wood and secured to a central shaft or spindle, and also a paper covering in the form of a cylinder secured to the peripheries of these spiders. On this covering was a chart on which was indicated weights and price computations, which were exposed through a horizontal slot in the enclosing casing, which slot had on an edge price per pound marks, which in connection with the price computations indicated the price of the article being weighed according to the price per pound. That, while these indicator drums employing the wooden spiders weighed more than drums of the same size employing metal spiders as made and sold by the defendant herein, they operated in

the same manner and produced substantially the same result as the indicator drum of the Smith patent in suit. That the use of these scales, including said indicator drums, was free and open to the public including this defendant for many years prior to said date of manufacture of cylinder scales by this defendant, and par-
846 ticularly that such use was free and open to this defendant during the infringing period of these accounting proceedings.

We also offer to prove the relative costs of manufacture of such drums employing wooden spiders as compared with the drums employing metal spiders such as those in suit.

Mr. Zane: Is that scale the one that's known as the Phinney Scale?

Mr. Hibben: I don't know what you mean by the Phinney Scale. It is a scale just as I have related. It is not the scale of the Phinney patent if that's what you want to know.

Mr. Zane: Well, perhaps you could state the names of the witnesses you intend to examine.

Mr. Meads: I think we can give you some of them. I don't know as we can give you all.

Mr. Zane: Well, who are some of them?

Mr. Hibben: These and others: John H. Devlin, William E. Gillan, E. Willard Horton, Thomas Z. Phinney and William M. Raymond.

Mr. Zane: Now, these witnesses are all on this point you have mentioned, that is, the existence of a certain scale that was open to use and had been open to use for twenty years.

Mr. Hibben: Yes, the manufacture and sale of it.

Mr. Zane: And of actual sales made of this kind of a scale?

Mr. Hibben: Yes.

The Master: Was this scale patented?

Mr. Hibben: No.

Mr. Zane: Now, your Honor please, Mr. Hibben says that this particular scale was not patented. This particular scale is the Phinney Scale, a scale made by Phinney, the father of this Thomas Z. Phinney whom you are to call as a witness, was it not?

I think they ought to be perfectly frank with the Master.

Mr. Meads: We are trying to be perfectly frank, but we can't follow your assumptions.

Mr. Zane: They have spoken of one scale.

Mr. Meads: We shall not confine this examination to one scale. If you understood that, you misunderstood. This examina-
847 tion will not go to one scale, but will go a good many scales.

Mr. Zane: But one type of scale, the type of scale of the kind you have described?

Mr. Meads: If Phinney made scales like these that we are discussing. I would not want to be understood as saying he did. He may not have done it, but we are not confining ourselves to one scale.

The Master: Well, you propose to select a standard of comparison, you do not propose to select several standards?

Mr. Meads: No. We will show a general use in New England,

especially in Rhode Island, of this kind of scale, whether made by Phinney or somebody else.

The Master: But your testimony will be confined, as I take it, to one type of scale?

Mr. Meads: Yes. We will show a very general sale and use of that scale.

(Argument here followed, which was continued on February 10, 1917 and concluded. On February 12, 1917, the Master ruled as follows: * * *

The Master: The request of counsel for the defendant made on February 9, 1917, that the Master fix a time and place in the City of Providence, Rhode Island, for the taking of certain testimony outlined by counsel and appearing in the transcript is denied. My reason for denying the request is that I am of the opinion the proposed testimony would be incompetent, that the so-called standard of comparison rule does not apply in an accounting in a case involving the infringement of a patent covering an entire machine where the infringement consists in making and selling the infringing machine.

Thereupon on motion of counsel for defendant an adjournment was taken until March 13, 1917, at Toledo, Ohio.

Toledo, March 13, 1917.

Met pursuant to adjournment.

Present:

Messrs. Meads and Hibben, for Defendant.
Messrs. Zane and Morse, for Complainant.

848 HENRY THEOBALD, a witness called on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am the President of the defendant company, and have been engaged in the manufacture and scale of scales in Toledo, Ohio, since July, 1901. Before we started manufacturing at Toledo, we acquired the patents, good will and equipment of the De Vilbiss Computing Scale Company. There was a contract of purchase and a bill of sale of inventions, patents and other property, and assignments of the patents. I have here a copy of the bill of sale and of the contract."

"The witness stated that the paper was the original contract. This contract was offered in evidence, marked as Defendant's Exhibit No. 35, and the plaintiff objected that it was irrelevant to the issues, that the signatures had not been proven; that so far as the corporation was concerned, it was not under the seal of the corporation. The witness then testified that he was present when it was signed; that

he saw Mr. Rakestraw and Martin T. Gay sign it, as well as C. Edwin Young; that the Security Trust Company did not sign it at the time; that he thought that must have been a later signature. The document was thereupon admitted in evidence as follows:"

Memorandum of Agreement made this first day of July, 1901, by and between The De Vilbiss Computing Scale Company, a corporation organized and existing under the laws of the State of Ohio and having its principal place of business at Toledo in said State, of the first part, Henry Theobald, of Dayton, Ohio, of the second part, Matthew T. Gay and C. Edwin Young, both of Newark, New Jersey, of the third part, and The Security Trust Company, a corporation organized and existing under the laws of the State of Ohio and having its principal place of business at Toledo, in said State, of the fourth part.

1. Said parties of the second and third parts agree that they will, as promptly as practicable, cause to be organized, under the laws of New Jersey, a corporation, the purpose of which shall be to manufacture, deal in and sell scales and cash registers, having a capital stock whereof not more than three hundred thousand dollars
849 shall be cumulative first preferred stock, at six per centum per annum, dividends upon which shall be paid before any dividends shall be paid upon any other stock in any distribution of assets; that they will cause subscriptions, payable in money, to be made to the capital stock thereof to the extent of not less than one hundred and twenty thousand dollars ($120,000), which subscriptions shall be paid in money only, from time to time as funds shall be needed for the uses and purposes of said corporation; that said corporation shall buy from said party of the first part all of its assets of every kind, nature and description, including its real property in Toledo, Ohio, fronting one hundred and twenty (120) feet on Albion-street, one hundred and fifty-three (153) feet on Bishop-street and one hundred and fifty-six (156) feet on the alley next southwesterly from said Albion-street, together with all fixtures, machinery, tools furniture, models, patterns, scales manufactured and in process of manufacture, stock in trade and materials and all inventions and patents of the United States and foreign countries, and applications for patents, belonging to said party of the first part, excepting, however, all accounts, bills receivable and corporate books and papers, and shall pay therefor the sum of one hundred and ninety thousand dollars ($190,000) as follows, to-wit: twenty-five thousand dollars ($25,000) in cash; ten thousand dollars ($10,000) in said first preferred stock; and one hundred and fifty-five thousand dollars ($155,000) in money in the following instalments, viz: five thousand dollars ($5,000) in one (1) year; twenty-five thousand dollars ($25,000) in two (2) years; fifty thousand dollars ($50,000) in five (5) years; and seventy-five thousand dollars ($75,000) in ten (10) years; that said one hundred and fifty-five thousand dollars, deferred instalments of the purchase price, shall be evidenced by negotiable coupon bonds for the principal sum of one thousand dol-

lars ($1,000) each, payable to said party of the fourth part, or bearer, at the office of said party of the fourth part, with interest payable semi-annually or annually, as such corporation to be formed shall elect prior to the making of said bonds, and shall be secured by a first mortgage or mortgages of all the real and personal property and letters patent acquired or to be acquired (including all reissued patents), by said new corporation, which bonds and mortgage
850 shall be in such form as said parties of the first and fourth parts shall approve; and that no other bonds or obligations whatsoever shall be secured by said mortgage or mortgages, or any of them, nor by any mortgage upon any property of said corporation to be formed; that said corporation to be formed shall buy from said party of the second part all letters patent of the United States belonging to him, for, or pertaining to, cash registers, being all letters patent of the United States therefor now standing in the name of Mast, Foos & Company, of Springfield, Ohio, all of which are owned by said party of the second part, and all machinery, materials, patterns, models, molds, tools and stock, and manufactured product, owned by said party of the second part, in, about, for or pertaining to, cash registers, or the manufacture thereof, and will pay therefor the sum of sixty thousand dollars, ($60,000) in preferred capital stock of said corporation to be formed.

2. Said parties of the first and second parts hereby agree, each for himself, to sell the said several properties and rights so by said corporation to be purchased from them respectively.

3. Said parties of the second part and third parts agree that said corporation shall be organized and shall issue and deliver to said party of the first part at the office of said party of the fourth part, in Toledo, Ohio, the said preferred stock, bonds and mortgages, as promptly as practicable, and, at all events, in not less than sixty (60) days from the date hereof, and said party of the first part agrees that, within ten (10) days after it shall have received notice that said new corporation has been formed, and is duly authorized to receive such conveyances and assignments, it will make and deposit in escrow with said party of the fourth part a good and sufficient deed and assignments, in such form as said parties of the second and third parts shall approve, conveying all of said property and rights to such new corporation; the same to be delivered by said Security Trust Company to such new corporation upon the delivery to said party of the first part of the consideration, moneys, preferred stock, evidences of indebtedness and securities hereinbefore specified.

4. Said party of the first part is entitled to interest upon the said one hundred and fifty-five thousand dollars, deferred instal-
851 ments of purchase price, at five per centum, and upon said ten thousand dollars preferred stock at six per centum, from the fifteenth day of July, 1901. But said preferred stock and said bonds and mortgage may bear such date, not later than sixty (60) days from the date hereof, as such new corporation may determine, provided that unless said bonds shall bear interest from said fifteenth

day of July, 1901, and said preferred stock shall bear dividends from the same date, such new corporation shall, at the time of the delivery of said stock and bonds, pay to said party of the first part interest thereon at the respective rates aforesaid from said fifteenth day of July, 1901, until the dates upon which dividends upon said stock and interest upon said bonds begin to run.

5. A portion of the real property hereinbefore mentioned being now occupied by The Toledo Cooker Company, said party of the first part shall have ninety (90) days from date hereof to obtain and deliver possession of such portion.

6. Said real property shall be conveyed to such corporation free from all taxes and assessments.

7. Twenty-five thousand dollars has been by said parties of the second and third parts deposited with said party of the fourth part, who shall, upon the exchange of papers as hereinbefore provided, pay the same to said party of the first part as the down payment for properties.

8. The said purchase and sales shall take effect as of this date. Said party of the first part shall continue to operate its plant until the consummation of this agreement, but upon the consumation thereof within the time herein specified, such operation shall be deemed to have been for the account of such new corporation, which shall have the benefit of al- sales not filled by shipment prior to the date hereof and shall pay for all stock, tools and machinery received after the date hereof.

9. The sales made to such corporation shall not include any accounts or bills receivable made or incurred prior to the date hereof, and such new corporation shall not assume any liabilities incurred prior to the date hereof, except for materials, machinery and tools purchased but not received before this date.

10. If Hugh Alexander of Montclair, New Jersey, tenders
852 to said new corporation to be formed fifty thousand dollars ($50,000) for the British and French scale patents and pending applications for patents, or sixty-five thousand dollars ($65,000) for the British, French and German scale patents and pending applications for patents belonging to said party of the first part, such new corporation to be formed shall accept the same.

11. Said party of the fourth part accepts the duties hereby imposed upon him, and undertakes that it will for the usual and ordinary compensation charged by it therefor, act as trustees under the several mortgages hereby contemplated.

In Witness Whereof said party of the first part has caused its corporate name and seal to be hereunto signed and affixed by F. M. Rakestraw, its president, and L. W. Rakestraw, its secretary, said parties of the second and third parts have hereunto set their hands and seals, and said party of the fourth part has caused its corporate

me and seal to be hereunto signed and affixed by C. F. M. Niles, secretary.

12. In no event shall said parties of the third part be liable for mages for failure to perform this contract in an amount in excess twenty-five thousand dollars.

THE DE VILBISS COMPUTING SCALE CO.
By F. M. RAKESTRAW,
Prest.

Attest:
L. W. RAKESTRAW,
MATTHEW T. GAY.
Secy.

HENRY THEOBALD.
C. EDWIN YOUNG.
THE SECURITY TRUST COMPANY,
By C. M. F. NILES,
Treasurer."

Then was offered in evidence a copy of the original assignment rom the De Vilbiss Computing Scale Company to the Toledo Scale t Cash Register Company, of certain patents and other matters nder date of July 15, 1900. The witness stated that he could not ay that he was present when that instrument was signed, but he saw he original assignment at some time, of which this is a copy.

"The witness testified that he had seen the original assignment at or about or shortly after the time it was executed: that at his 553 request Mr. Kelly, Mr. Zolg and Mr. Frye had gone through the papers, records and vaults, and are unable to locate the riginal, and we think it must have been lost by the Security Trust Company; and that he had at one time had the original in his ossession. He supposed that he saw the signature of Louid Watson Rakestraw on the original, but could not recall, and that he knew hat he saw the original. It was drawn up by Brown & Geddes, is attorneys, and he familiarized himself to a certain extent with the atents that he was purchasing and tallied and checked up on the ssignments. I don't know whether the signature of Rakestraw was n it, I suppose it was. He also testified that the original assignment ad been recorded in Washington; this purports to be a copy, and is a copy of the original, a carbon copy. The signature of Allen De Vilbiss, Jr., was on the original, but this signature is not his. I saw him sign his name at various times. He was afterwards in my employ. That the Notary's certificate was that of Frederick Lyman Geddes, a Notary with whom he had been acquainted for many years, and whose signature he knew."

The document was offered in evidence and objected to as not competent as well as not material and relevant; that a copy of the original could be furnished by a certified copy from the Patent Office.

GEORGE R. FRYE, a witness on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am the head of the Patent Department of the Toledo Scale Company and have charge of the various papers, such as patents, assignments, etc. I have made a search for the original assignment from the De Vilbiss Computing Scale Company to our company, under date of July 15, 1901. In the course of this search I examined all the records in the Patent Department, as far as that exists on the fourth floor of the factory, and then solicited the assistance of Mr. Zolg and Mr. Kelly in conducting a search in the vaults and other places on the first floor of the factory where there was a likelihood that the original assignment might be kept, looking everywhere where original assignments are kept. I did not find the assignment in question and do not know of any other place where I might look with any possibility of finding it. I think I have exhausted every avenue of search."

854

Cross-examination.

By Mr. Zane:

"I first looked in the Patent Department on the fourth floor of the factory and then went down to the first floor to search what we call our vault. As that is not under my specific charge, I requested the help of Mr. Zolg and Mr. Kelly, and with them conducted the search there. That was everywhere I looked."

Then testimony as follows:

The Master: You were present with the other gentlemen when they were making the search?

A. Yes, and they didn't locate it at all.

Mr. Meads: I will bring the other two.

The Master: I do not think it is necessary.

Mr. Zane: Wait just a minute, your Honor. Let me have the paper you offer. Now, he says that is the only places he looked. The paper shows on its face where the original is and they never even looked there. It says here, "The Security Trust Company of Toledo, Ohio, has received an instrument whereof the foregoing is a true copy, deposited with it pursuant to a certain contract dated July 1, 1901." That shows on that very paper that the place where it was last heard of is the place they have not looked. I asked him particularly if that's everywhere he looked.

Mr. Meads: All right, I will cover that now.

HENRY THEOBALD, resumed the stand for further examination.

Direct examination (continued).

By Mr. Meads:

"At the time the mortgage was paid at the Security Trust Company, they did not immediately return the papers, but we called for our papers some time after, and got back from them the papers that they had. I have forgotten now what the extent of the papers were, but the officers of the Security Trust Company made an
855 exhaustive search, not only once but upon several occasions at my request, and were unable to find all the papers. All that they could locate were returned."

Cross-examination.

By Mr. Zane:

"I do not know exactly what papers were actually returned by the Security Trust Company. It would be impossible for me now to recall."

Redirect examination.

By Mr. Meads:

"They told me that they had given us absolutely all they had."

Then testimony as follows:

Mr. Meads: Now, I offer the instrument identified by the witness.

Mr. Zane: Same objection.

The Master: When did you first learn you didn't have this original of the document that's offered?

A. When we paid off the mortgage we then wanted to get all the papers in our own possession and called upon the Security Trust for them and they had made some material changes and discarded things that were useless at different times.

The Master: Well, they reported to you they could not find it?

A. They reported to me personally they could not find the papers, one of the chief executive officers of the company reported to me personally.

The Master: Objection overruled.

(Said document, so offered, received, in evidence, marked Defendant's Exhibit 36, and is in the words and figures the following:)

"Know All Men By These Presents: That the De Vilbiss Computing Scale Company, a corporation organized and existing under the laws of the State of Ohio, and having its principal office at No. 2327 Albion street, in the city of Toledo, in the County of Lucas, in said state, in consideration of five dollars, to it paid by Toledo Scale and Cash Register Company, a corporation organized and existing under the laws of the State of New Jersey, and having its principal office

at No. 20 Bruin Street in the City of Newark, in the County
856 of Essex in said State, the receipt whereof is hereby acknowledged, does hereby Grant, Bargain, Sell, Assign, Transfer and Convey unto said Toledo Scale and Cash Register Company, and to its successors and assigns forever, all the assets, properties and rights, of every kind, nature and description and wheresoever situated, of said The De Vilbiss Computing Scale Company, including all fixtures, Machinery, tools, furniture, models, patterns, scales manufactured and in process of manufacture, stock in trade, materials and inventions, patents of the United States and foreign countries and applications for patents, including the whole right, title, interest and claim in and to all the following foreign patents and applications for patents for inventions and improvements in scales and in devices relative thereto, viz:

Five English Cases, to-wit: Case E, patented March 14, 1899, No. 5508; Case M, patented May 14, 1900, No. 8852; Case T, patented November 15, 1900, No. 20610; Case 31, filed April 23, 1901; and Case 34, filed May 6, 1901.

Five French Cases, to-wit: Case C, patented March 14, 1899, No. 286-798; Case L, patented May 15, 1900, (addition to and same number as the above); Case 32, filed April 25, Serial No. 298,765, Case 35, filed May 8, 1901; and Case U, patented February 20, 1901, No. 305,598; and

German Cases V, 29, 30 and 36.

Excepting however and reserving from this sale, assignment and transfer all the moneys, accounts, bills receivable, books and papers of said the De Vilbiss Computing Scale Company.

To have and to hold the same to the said Toledo Scale and Cash Register Company and its successors and assigns, to its and their own use and behoof forever.

And said The De Vilbiss Computing Scale Company hereby covenants to and with said Toledo Scale and Cash Register Company that it is the owner of the properties hereby sold and as-igned and has good right to sell the same as aforesaid, that the same are clear and free from all claims, liens and debts, and that it will warrant and defend the same against the lawful claims and demands of all persons whomsoever, except as follows, viz:

1. This assignment is made subject to certain options heretofore given to Hugh Alexander of Montclair, New Jersey, for the purchase of some or all of said foreign patents and applications for
857 patents, and said Toledo Scale and Cash Register Company shall perform and carry out the same to the extent that said The De Vilbiss Computing Scale Company should be required to do had this assignment and sale not been made.

2. Said The De Vilbiss Computing Scale Company does not hereby guarantee the validity of any said patents, nor that any pending applications for patents shall be issued, but hereby sells, assigns and transfers only the rights which it has therein and thereto, whatever such rights may be, and does not undertake either to prosecute any

pending application, or to defend any patent heretofore or hereafter issued or to pay any annuities or other charges or expenses hereafter accruing. Said Toledo Scale and Cash Register Company takes said patents and applications as they now are, but may, whenever it deems it necessary or expedient so to do, use the name of said The De Vilbiss Computing Scale Company in any prosecution or defense of any thereof, but at the expense nevertheless of said Toledo Scale and Cash Register Company.

3. Forasmuch as this instrument is not in the usual form of assignments of said foreign patents and forasmuch as assignments of pending applications for patents are not effective in some or all of the countries in which said applications are pending; said The De Vilbiss Computing Scale Company does not hereby covenant that this instrument is sufficient to effect transfers of the legal titles to and of said patents and applications therefor, but does covenant that it will, from time to time, upon reasonable request of said Toledo Scale and Cash Register Company, execute and deliver, and cause to be executed and delivered, all such further assignments, which may be tendered to it by said Toledo Scale and Cash Register Company, as shall be necessary or proper to vest in said Toledo Scale and Cash Register Company, or in such person or persons as it may designate, the legal title to any and all patents heretofore granted or which may be hereafter granted upon said pending applications or any of them.

In Witness Whereof said The De Vilbiss Computing Scale Company has caused its corporate name and seal to be hereunto signed and affixed by Florentine Montgomery Rakestraw, its Presi-
858 President, and Allen De Vilbiss, Jr., its Vice-President, and to be attested by Louis Watson Rakestraw, its Secretary, at Toledo aforesaid, this fifteenth day of July, 1901.

THE DE VILBISS COMPUTING SCALE COMPANY,
By FLORENTINE MONTGOMERY RAKESTRAW,
President.
ALLEN DE VILBISS, JR.,
Vice President.

Attest:

[Corporate Seal.]

LOUIS WATSON RAKESTRAW,
Secretary.

Witnesses:

FREDERICK LYMAN GEDDES.
HENRY GERHARDT KUHLMAN.

UNITED STATES OF AMERICA,
State of Ohio,
County of Lucas, ss:

Before me, the subscriber, a Notary Public in and for said County and State, on this twenty-seventh day of July, 1901, personally appeared The De Vilbiss Computing Scale Company, by Florentine Montgomery Rakestraw, its President, Allen De Vilbiss, Jr., its vice President, and Louis Watson Rakestraw, its Secretary, all personally known to me to be the persons described in the foregoing instrument, and severally signed the said instrument in my presence, and acknowledged the same to be its and their free act and deed.

In Witness Whereof I have hereunto set my hand and official seal:

[Notarial Seal.] FREDERICK LYMAN GEDDES,
Notary Public in and for Lucas County Ohio.

Toledo Scale and Cash Register Company hereby accepts the foregoing assignment, and, in testimony thereof, has caused its corporate name and seal to be hereunto signed and affixed by ——
859 ——, its president, and to be attested by —— ——, its secretary, this — day of ——, 1901.

TOLEDO SCALE AND CASH REGISTER COMPANY,
By —— ——.

UNITED STATES OF AMERICA,
State of ——,
County of ——, ss:

Before me, the subscriber, a Notary Public in and for said County and State, on this — day of ——, 1901, personally appeared Toledo, Scale and Cash Register Company, by —— ——, its president, and —— ——, its secretary, both personally known to me to be the persons described in the foregoing instrument, and severally signed the said instrument in my presence, and acknowledged the same to be its and their free act and deed.

In Witness Whereof I have hereunto set my hand and official seal.

Notary Public in and for —— ——,
County, ——.

The Security Trust Company of Toledo, Ohio has received an instrument, whereof the foregoing is a true copy, deposited with it pursuant to a certain contract, dated July 1, 1901, made by The De Vilbiss Computing Scale Company, Henry Theobald, Matthew T. Gray, C. Edwin Young and said The Security Trust Company.

THE SECURITY TRUST COMPANY,
By C. F. M. NILES,
Treasurer."

Copy.

"The instrument marked Defendant's Exhibit No. 36 was between the De Vilbiss Computing Scale Company and the Toledo Scale and Cash Register Company. The Toledo Scale and Cash Register Company was the predecessor of the Toledo Computing Scale Company, the defendant in this cause. The business has been conducted continuously by one or the other of these com-
860 panies in the same place, the only difference being in the names. Following the receipt of the agreement now marked Defendant's Exhibit 35, the company acquired certain patents, copies of certain of which I now present."

(Witness here presented a printed copy of United States Letters Patent, No. 839,736, issued to the Toledo Computing Scale Company on application of Allen De Vilbiss Jr., filed April 9, 1901.)

Then testimony as follows:

Mr. Meads: I offer in evidence, if your Honor please, the instrument identified by the witness. There is a stipulation in the early stages of this case that the printed copies of the patents may be deemed to be evidence of the patent itself.

Mr. Zane: We object to this document as irrelevant and immaterial and as inadmissible under the issues in the case as they have been settled by the Circuit Court of Appeals—this purports to be a patent for a cylinder scale—and that everything connected with that patent is concluded by the decision of the Circuit Court of Appeals.

The Master: Objection overruled.

(Said printed copy of Letters Patent No. 839,736, so offered, received in evidence and marked Defendant's Exhibit 37.)

"After the acquisition by us of the patent in evidence we continued to manufacture and sell the types of scales which were then being sold by the De Vilbiss Computing Scale Company, placing them on the market, and proceeded then to perfect other inventions acquired at the time, preparing to make an entire line of scales, and we brought out the different types of scales as rapidly as we could. We proceeded first to make and sell the fan type scale as we had all the patterns and tools for that device."

Then testimony as follows:

Q. At the time that you acquired the invention represented by Defendant's Exhibit 37 do you know whether there were any cylinder platform scales upon the market?

A. There were not.

Q. Described briefly what form of scales known as cylinder scales were then on the market.

Mr. Zane: We object to this as irrelevant and immaterial
861 and not admissible under the issue that have been referred to the Master and are now open in the case.

The Master: I will take the testimony subject to the objection.

A. The only cylinder scales on the market at that time were of the hanging or suspended type.

Q. Did you after the acquisition of the invention described in Defendant's Exhibit No. 37 immediately or at any time since manufacture for sale a cylinder scale of the hanging type?

A. We never have.

Q. What type of scales have been the cylinder scales which you have manufactured and sold?

A. The combined cylinder and platform with a stationary counter platform.

Q. When did you manufacture the first of the scales upon the plan to those described in Defendant's Exhibit 37, if at all?

A. The first completed scale ready for the market was exhibited at the Universal Exposition at St. Louis in the summer of 1904.

Q. Did you see the scale before it went to the Exposition at St. Louis?

A. Yes.

Q. Did you see it at that Exposition?

A. Yes.

Q. What features, if any, did you incorporate in cylinder platform scales when you began their manufacture that were not embodied in the so-called hanging cylinder scales which you have described?

A. Of course, the first and great feature involved was the actual combination of the platform and the cylinder. That was one great virtue because of the greater utility of the platform scale.

Q. In what regard was the platform scale superior to the cylinder scale such as you have described and called hanging scales?

Mr. Zane: This is all subject to our objection, your Honor?

The Master: Yes, that's understood.

A. The suspended type of scale was generally swinging, the platter not being stationary. If a commodity was placed upon the edge of one side of it, it would tilt, tilt out of position. The con-
862 stant swinging and movement of the scale caused the cylinder to oscillate so it was quite impossible to read the correct amount, either of the weight or of the prices. Many times the cylinder because the pan was suspended, the hanging pan had to be above the counter, the cylinder itself was so high as to be out of the range of vision of an ordinary sized person, and it frequently became necessary for the operator in order to bring the swinging scale to a position of rest so he could read it to take hold of it with his hands and in that way it would affect the registration in fact many operators intentionally caused the cylinder to oscillate a little in his favor when he placed his hand upon it. Those were among

the chief objections. And there was one other material objection, that they were all equipped with incorrect charts, dishonest charts.

Q. Just one thing at a time, Mr. Theobald. The differences between the hanging scale and the platform scale as such, irrespective of any question of chart——

A. Yes.

Mr. Zane: We move to strike out the statement as to how they were equipped as stating a conclusion first and as irrelevant and immaterial.

The Master: Motion denied.

Mr. Zane: Exception.

Mr. Meads: Well, strike out the whole question.

Q. What features, if any, did you incorporate into the cylinder platform scale which had not been incorporated in the so-called hanging cylinder scale?

A. Well, I would refer first to the dash-pot.

Q. The dash-pot?

A. To stop oscillation.

Q. Describe briefly what you mean by a dash-pot.

A. I referred a moment ago to the oscillation of the scale, of the cylinder. Very many efforts have been made to stop the oscillation of the cylinder, but it was not successfully accomplished until the equipment of this liquid dash-pot which is a device——

Q. Describe it to the court.

A. Let us say it is a cylinder located in the base of the scale containing an oil or a liquid, and in this cylinder there is a piston head operating connected with a stem, piston stem, and the stem is attached to the main lever or some other moving part of the mechanism so that when a load is placed upon the scale it quickly
863 brings the cylinder and the moving parts to a position of rest without any appreciable extent of friction. It serves also as a shock absorber. If a heavy load is suddenly thrown upon the scale, the piston head going down into the oil checks the movement and prevents the injury of the vital parts of the scale. The piston head of course is made to operate very close to the walls of the cylinder. There is a very little space between the piston and the walls of the cylinder, so the piston head was made in two moving parts, two parts, with holes through so that the holes could be opened or closed by an adjustment from the outside, giving a freer movement when the liquid becomes cold, or rather, opening the holes to allow a freer movement of the liquid when it is cold and thick, and it can be closed in hot weather so that regardless of the temperature a uniform, easy, quick movement can be obtained and the oscillation of the cylinder regulated so as to come to a stop quickly and without perceptible friction. Oscillating regulator and shock absorber in brief words. That was quite an achievement by the way.

Q. Was the dash-pot a device which had been previously used by you?

A. Yes, it was a patented device.

Q. We are coming to that in just a moment, Mr. Theobald. It was a device which had been previously used by you in what scale?

A. In the manufacture of our fan type scales.

Q. And was that device placed by you on all the cylinder scales which you manufactured?

A. Yes, sir.

Q. You have said that that device was a patented device. Have you before you any patents which show the device in question?

A. Yes.

Q. I submit to you a printed copy of the specifications, claims and drawings of the United States Patent Office, Letters Patent No. 667,652, dated February 5, 1901, issued to the De Vilbiss Computing Scale Company, on application of Alen De Vilbiss, filed July 18, 1900, and ask you if that is one of the patents which you acquired at the time that you purchased these assets from the De Vilbiss Computing Scale Company.

A. It is, yes, sir.

Q. Is the device mentioned in that patent one of those
864 which you have just mentioned as being the dash-pot covered by letters patent which you own?

A. Yes.

Mr. Meads: If your Honor please, I offer in evidence letters patent identified by the witness.

Mr. Zane: We object to this as incompetent, irrelevant and immaterial. Of course, the dash-pot itself is an old device. This purports to show a combination patent for a machine consisting of various parts. Of course, there is no claim made for a dash-pot and the scale itself is of a fan scale, it is not a cylinder scale at all, and therefore we object to it as immaterial and irrelevant and on the additional ground that this is entering into a subject which is not before the Master and is not within the issues referred to the Master.

The Master: Well, on that question, as I understand it, they are introducing evidence on the theory that there were other elements in the scale that they manufactured and sold aside from the patent in suit which might have contributed to the profits. Now, is this part you speak of there but part of a combination patent not usable alone?

Mr. Meads: I will read one of the claims. (Reading:)

The Master: Objection overruled.

Mr. Zane: Exception.

(Said printed copy of Letters Patent No. 667,652, so offered, received in evidence and marked Defendant's Exhibit 38.)

Mr. Meads:

Q. Mr. Theobald, I show you Letters Patent of the United States as shown by the printed copy thereof, No. 830,976, under date of September 11, 1906, on application filed May 21, by Allen De Vilbiss Jr., and assigned to the Toledo Computing Scale Company. Is that

one of the patents which you acquired at the time you purchased the assets from the De Vilbiss Computing scale Company?

A. Yes.

Q. Is this one of the patents to which you have referred in your testimony?

A. Yes.

Q. As being patents covering the dash-pot?

A. Yes.

Mr. Meads: I offer, if your Honor please, the instrument identified by the witness and ask that it be marked Defendant's Exhibit 39.

865 Mr. Zane: Same objection that we made to the other patent we make to this with an additional objection in regard to this last, that it purports to be a mere improvement on patents and scales already existing and it is not shown what they were.

The Master: Objection overruled.

(Said Letters Patent No. 667,652, so offered, received in evidence and marked Defendant's Exhibit 39.)

Mr. Meads:

Q. What other features, if any, can you recollect which you incorporated into your cylinder platform computing scale which were not in the so-called hanging cylinder scale?

A. The fundamental means of counter-balancing the load in our scale, in our combined platform and cylinder scale was a pendulum mechanism, whereas in all *cly*inder scales previous to that time the local was counter-balanced by means of springs, and this of course was the great fundamental difference between our cylinder platform scales and previous cylinder scales.

Q. What defects or objections, if any, were there to the use of springs?

Mr. Zane: Same objection to this question, that it is not within the issues before the Master, would throw no light upon any issue in the accounting. To enter into an investigation here before the Master as to the relative merits of the weighing mechanism would throw no light upon the case at all.

(Discussion.)

The Master: I will take the testimony. Of course, it may be understood it is all taken subject to the objection.

A. The springs would contract when subject to cold and expand when subjected to a warmer temperature, causing variable results in weighing. They were unreliable and could not be depended upon to produce a uniform result.

Mr. Zane: We move to strike out the last statement, "unreliable and could not be depended upon to produce a uniform result", as too general in character and expressing a conclusion.

The Master: Motion granted commencing with the words in which he expressed the opinion that the device would be unreliable.

Mr Meads:

Q. You have stated, Mr. Theobald, that springs would contract with the cold and expand with the heat. What is the effect
866 when a spring contracts with the cold upon weighing mechanism if you know?

A. What do you mean, a weighing mechanism having springs that contract?

Q. I think that's a reasonable inference?

A. When the spring is contracted it will require more weight, stronger, stiffer.

Q. It is stiffer?

A. Stiffer and stronger and requires more weight.

Q. When a spring expands with the heat what is the effect on such spring?

A. It becomes more lax and requires less weight to make a certain indication.

The Master: Are not these matters within everybody's knowledge?

The Witness: Yes.

Mr. Meads: I don't know. I don't want to assume they are.

The Master: The witness has not qualified as an expert or anything of that kind. Those matters are matters that one person knows as well as another.

Mr. Meads: I am not going to presume that, your Honor: If the court will take judicial notice of that fact, I don't care to waste time on it.

The Master: I make this suggestion because all this testimony goes in subject to objection.

Mr. Meads: I will qualify the witness as an expert if you want me to, your Honor, but if the court will take judicial notice of it, I don't care to prove it by expert testimony. However, I am going to put another question along something else.

Q. Mr. Theobald, did any of the so-called platform cylinder scales manufactured by you contain springs to actuate the w-ighing mechanism?

A. None whatever.

Q. Were you familiar with the various types of scales in the market at the time you began to manufacture these scales?

A. Yes.

Q. Up to the time that you began the manufacture of the platform cylinder scales were there any scales of the cylinder type on the market which were actuated by a pendulum?

A. No.

867 Q. Were you the first to so manufacture such scales?

A. Yes.

Q. What other features, if any, were incorporated by you in the platform cylinder scales when you began to manufacture them?

A. The construction of our cylinder chart and the method of placing the figures representing the prices was a complete departure inasmuch as we made our chart strictly honest in its calculations

by putting the figures on the chart with aritmetical precision whereas all other cylinder charts up to that time were designed to give and advantage to the user of the scale. This was accomplished by placing a large percentage of the figures too near the balancing of the zero line so those figures upon the oscilating or the movement of the *court* would come into indicating position and represent a certain value before the requisite amount of goods was on the platform and that feature and advantage of that type of scale was exploited and advertised as a special advantage.

Mr. Zane: Move to strike out his statement "and exploited and advertised" as stating a conclusion.

The Master: Motion granted.

A. (continued). But in the equipment of our scale every figure representing weight, every graduation and figure representing weight was accurately placed so that whenever it was brought into indicating position full and correct weight was on the platform of the scale. It could not be brought into indicating position without the requisite weight being on the platter. That was a fundamental difference and one of the chief features of our cylinder scale.

Mr. Zane: We move to strike out now all his answer as to the third feature for the reason that that also introduces a collateral inquiry and the inquiry simply is this, whether or not the preferable way of making a chart for a scale is to put the exact calculation expressed in even cents opposite the weight indication on the scale or whether it is to make the value indications indicate the different parts of a pound according to the number of cents in the price per pound. The difference is here, your Honor, and you will see how perfectly irrelevant it is as to any inquiry as to profit.

(Discussion.)

The Master: I will sustain the motion to strike.

868 Mr. Meads:

Q. Mr. Theobald, how were the figures placed on the chart which you incorporated in the socalled platform cylinder scales?

A. At each price per pound the space on the chart per pound was divided, or I should say each price was divided into as many spaces as there were cents in the price per pound, for example in the column representing the unit price of 30 cents, that pound was divided into 30 equal parts, each one of those parts representing one cent, and wherever figures were placed representing a value or indicating a value, those figures were bisected by the money denoting that value.

Q. As the cylinder revolved?

A. So that as the cylinder revolved whenever a figure representing a money value was brought into indicating position, the exact money value was on the scale, for example, if at thirty cents per pound the value should appear as nine cents there would be 9/30ths

of one pound of merchandise on the scale, so that whether the device was used to sell commodities by weight or whether it was used to sell commodities by value which it was designed to do——

Mr. Zane: Move to strike out the statement "which it was designed to do."

Mr. Meads: All right, strike out those words.

A. (continued). Whether the device was used to sell commodity by weight or whether by money value, the plan which we adopted always gave the exact weight for the money value indicated.

Q. The question is what plan did you adopt.

A. I think that probably will describe the plan.

Q. Under such an arrangement of figures on a chart, the figure representing the various money values would not appear in straight horizontal lines, would they?

A. Never.

Q. As read across the chart?

A. Never. That's easily explained——

Q. Just one minute, Mr. Theobald. Were you familiar with the computing scales of the cylinder type on the market at the time you acquired this invention?

A. Yes.

Q. Do you know what was commonly known as the Smith scale or the Boston Butcher scale?

869 A. Yes.

Q. Tell the court how the figures on the chart of that scale were arranged.

Mr. Zane: We will object to this as irrelevant and immaterial. This is settled by the issues in the case, how those figures are arranged on the chart, it has been offered in evidence. The scale was offered in evidence and the Circuit Court of Appeals has passed upon the scale, it has found what the different elements were in the scale and it has passed upon any question which could be involved in placing the figures upon the chart. That's all a part of the general issue that's been passed upon.

Mr. Meads: This question had never even been adverted to by the court up to the present time.

(Question read.)

Mr. Meads: To show what he did to differentiate his chart from the others. The question is first what he did, what kind of a chart he put on his scale.

Mr. Zane: I object to having testimony here already offered and in the printed record upon the issue that went to the Circuit Court of Appeals and was decided.

Mr. Meads: That statement I think counsel of course makes in good faith, but that's not correct.

Mr. Zane: It is in the printed record. We will show it and show the testimony of witnesses as to how those figures are on the chart and how they are brought into being.

Mr. Meads: Here is the printed record of the case. If it is in, I will not burden the Master. I hope it is in the record. (Producing printed record.)

The Master: I will take the testimony.

(Question reread.)

A. Can I make a little remark?

Mr. Meads:

Q. Just answer the question.

A. Shall I get a copy of the chart to refresh my mind?

Q. No, just answer the question first.

A. All right. The space occupied by each pound in the Smith chart was divided into eight spaces without any regard to the price per pound or the price unit. At four cents a pound there were eight figures, one figure opposite each two ounces. At thirty cents a pound there were also eight figures, one opposite each two ounces. At five cents a pound, to illustrate the fallacy——

870 Mr. Zane: We object.

The Master: Go ahead.

A. (continued). To illustrate how it was not possible with such an arrangement of figures to get a correct weight when certain figures——

Mr. Zane: We object to this illustration because it has no bearing upon the issues.

A. Well to illustrate, at five cents a pound or at nine cents a pound—put it at nine cents a pound—the figure 5 was placed opposite 8 ounces, so that for five cents a pound—no, so that at nine cents a pound five cents would be indicated on the chart as the value of eight ounces, whereas it is plain that five cents is the value of eight ounces at ten cents a pound. There were on these Smith charts something over four thousand figures representing values and more than three thousand of these figures representing value were placed in the manner that I have described, too near the zero line.

Mr. Zane: Move to strike out "too near the zero line."

A. Placed in the manner I have described, were placed too near the zero line.

Mr. Zane: Move to strike out his statement "too near the zero line." That goes into the theory of the construction of the chart.

A. Well, inaccurately placed.

Mr. Zane: We move to strike out "inaccurately.' He says placed as he has described it, but his statement "Inaccurately" or "too near the zero line" we object to.

A. Well, placed as I described them. So then placed as I described them, there was more than three thousand out of the four thousand that were placed as I have described with reference to the

nine cent price, so that when those three thousand or more value figures were indicated insufficient weight for those values was on the scale.

Mr. Zane: Move to strike out "so that" and all the rest of it.

The Master: I think it may stand. I don't know how you can describe it without some conclusion.

Mr. Meads:

Q. Did you at the time that you began the manufacture of your so-called pendulum cylinder scales or at any time since place
871 in the scales of your manufacture charts constructed on the plan of the so-called Smith chart?

A. Not in one single instance?

Q. At the time that you acquired the so-called pendulum cylinder patent from the De Vilbiss Scale Company were there any scales upon the market of the cylinder type with a chart arranged upon the plan which you have described as followed by you?

A. At the time that I acquired the invention?

Q. The invention.

A. There were no such charts upon the market, cylinder charts upon the market. We were the first to manufacture a cylinder chart upon our plan.

"Q. In the sale of your product who had charge of the advertising matter?

"A. I did

"Q. At the time that you began the manufacture and sale of the pendulum cylinder scales who had charge of the advertising matter?

"A. I did.

"Q. Have you at any time in the sale of your cylinder scales by advertising matter or otherwise made any effort to sell your scales upon the strength of the difference in these charts?

"Mr. Zane: We object to that as calling for a conclusion from the advertising and as incompetent.

"The Master: Objection sustained.

"Mr. Meads:

"Q. What have you done, if anything, in the sale of your scales to effect such sales upon the difference of these two charts?

"Mr. Zane: Object to that as asking for the conclusion of the witness as a general conclusion.

"The Master: Objection overruled.

"A. We instructed all our salesmen as to the differences in the charts and as to the results that would follow the use of such charts.

"Mr. Zane: Wait a minute. We move to strike out his statement as to the instructions given as stating his conclusion and as irrelevant, immaterial, hearsay, incompetent in every way.

"Mr. Meads: If he knows. It is the substance of what he did in the sale.

"A. Let me say that I think——

872 "Mr. Zane: Let us have a ruling.
"The Master: Motion to strike sustained.

"Mr. Meads:

"Q. Did you yourself, Mr. Theobald, ever do anything with your salesmen as to the sale of scales manufactured by you, to enhance such sales by the difference between these two charts?

"Mr. Zane: We object as calling for the conclusion of the witness.
"The Master: Sustain the objection.

"Mr. Meads:

"Q. What have you done in the conduct of your business, Mr. Theobald, in the matter of the sales of cylinder scales, calling attention particularly to the matter of the charts which you have last testified to?

"Mr. Zane: We object to all this as irrelevant, immaterial, not competent under the issues before the Master.
"The Master: I don't think it is competent to prove statements made by Mr. Theobald, or at least general instructions to his agents. It may be competent to prove what those agents represented to the public, regardless of whether they had any instructions from the company or not. That is the only vital question, it seems to me. Instructions might have been given that were not carried out, and whether they were not is quite immaterial. The question is, if anything is competent on this line, what representations were made to the trade by persons handling the trade, and what, if anything, was the effect of it.
"Mr. Meads: Well, I am glad to know the court's theory, so I know the reason of his ruling.

"Q. Mr. Theobald, other than the instructions to agents, did you do anything with the general public in the matter of the sale of your so-called platform cylinder scales involving the distinction between scales embodying charts made on the plan of those in the Smith scale and those in the scales which you manufacture?
"A. Yes.
"Q. What, if anything, did you do?

"Mr. Zane: We object to this as irrelevant and immaterial.
"The Master: Objection overruled. I will take the answer.

"A. Yes, I caused large numbers of circulars to be printed, and distributed to the trade, drawing attention to the differences between the charts.

873 The Master: I will sustain the objection to the details of what you did. I think it is competent to show that you advertised, if you did, but not the contents of such advertising.

A. (continued). Oh I see. Yes, I advertised the differences.

Mr. Meads:

Q. Who controlled the circulation of advertisements?
A. I did.
Q. Have you any copies or duplicates of any advertising matter which you circulated?
A. Yes.
Q. Have you those in court?
A. Yes.
Q. I show you a circular beginning with the words "To the Public: Don't buy anything over scales like these" and ask you if you ever saw that or a duplicate of it before?
A. Yes.
Q. Who prepared that circular?
A. I did.
Q. What was done with those circulars after they were prepared?
A. Mailed in large numbers under my own personal supervision to thousands of merchants, distributed by messengers from door to door, delivered to the trade by salesmen and agents employed for that purpose. In fact I did everything in my power to get the message into the hands of the public.

Mr. Zane: Move to strike out the last clause.
The Master: Motion allowed.
Mr. Meads: The words "I did everything in my power"?
The Master: Yes.

Mr. Meads:

Q. During what time were those circulars so distributed?
"A. Almost continuously, that is, from 1906, or the latter part of 1906, throughout the years up to the present time in different numbers and volume.
"Mr. Meads: I offer in evidence, if the court please, the instrument identified by the witness and ask that it be marked Defendant's Exhibit 40.
"Mr. Zane: Now, is your Honor please, we object to it. The most of it, in fact all of it consists of an article on the scale
874 which they have held, that is, the judges of the Circuit Court of Appeals have held in this case to be infringed by their scale. That circular is just simply an attack on it.
"The Master: Does it not relate to the chart feature?
"Mr. Meads: Yes, your Honor. If you will see the circular itself, it is directed almost wholly to the chart.
"The Master: As I understand, this is offered on the theory of the defendant that this chart was gotten up by the defendant company

or by Mr. Theobald, and that it aided in the sale of the entire sale, a part of which was the cylinder, and on their theory they claim they have a right to some portion of the profits if they can make proof that warrants a finding in their favor on that question.

Mr. Zane: On the strength of that chart which they claim they inserted in our cylinders?

The Master: Yes, that's their theory based on the reasoning that something besides the patented invention contributed to the profits that were made.

Mr. Zane: Our patent without question covered cylinder and chart. Now, what they claim to have done here so far as the evidence of this witness is concerned is that a particular chart was inserted instead of the chart that was covered by the patent. In other words, they used our patent, that's all it amounts to.

The Master: They used your patent, but they attached to your patent, and, as they claim, made more valuable your patent by inserting a different kind of a chart.

Mr. Zane: If your Honor will look at it, all they claim is the arrangement of figures on the chart, that's all they claim.

The Master: Well, the weight of the testimony is one thing and the question of its competency another. I will overrule the objection.

(Said circular beginning "To the Public: Don't buy anything over scales like these," so offered, received in evidence and marked Defendant's Exhibit 40.)

"I now produce a circular entitled, 'Toledo No. 344, the only Springless Automatic Computing Scale in the World.' I prepared this circular and mailed them out in large numbers to retail dealers. I would estimate that more than 30,000 duplicates of this particular circular were mailed from 1907 to 1912. At the bottom of
875 the circular appears a picture of a combined Platform and Cylinder Scale showing the position the chart on a cylinder scale would assume if five pounds were being weighed on the scale: and it shows a section of the chart graduated on the principle which we have embodied in our scales.

(This circular was then offered in evidence and admitted over objection by counsel for the plaintiff, and marked "Defendant's Exhibit No. 41.)

I here produce a circular entitled, "No Man can afford to use a dishonest scale." I prepared this circular in my office at Toledo and had it mailed to the trade in large numbers—many thousands of them being distributed from about 1905 up to within the last few years. The distribution was under my supervision.

(This circular was here offered in evidence and admitted over objection of counsel for plaintiff and marked, "Defendant's Exhibit No. 42.)

I now produce a pamphlet entitled, "Moneyweight Scale Company vs. McBride Decision of the Massachusetts Supreme Judicial Court,

October 19, 1908." This circular was prepared at Toledo under my direction and was mailed by me by the thousands to the public generally and to the trade from 1908 to the present time.

(This circular was offered in evidence and admitted over objection of counsel for the plaintiff and marked, "Defendant's Exhibit No. 43.)

"I told this morning of the difference in the matter of springs between our scale as placed on the market—the Platform cylinder Scale—and the scales which were in existence at the time I acquired the De Vilbiss Patent, and to promote the scale of many pendulum scales, especially the platform cylinder scale, I directed the attention of the public to the difference between our scales and those that had springs. The witness was shown a circular entitled 'No Springs' in red at the upper right hand corner and 'Toledo Springless Automatic Computing Scale.' I prepared that circular and mailed thousands—more than 30,000 of this particular circular—to retail merchants and scale users in general during the year 1908 or 1909, 1910 and 1911. Attached to this circular are two separate instruments, one being a reproduction of two newspaper articles, one in the Boston Herald of October 20, 1908, and the other in the Toledo
876 Times of November 14, 1908, and the other attachment being a postal card. A clip was placed around the three, and these three articles were sent out at the same time in one package, just as they are here produced.

"Upon objection made by plaintiff to the body of the circular, as before, and as to the reproductions of newspapers, the Master overruled the objection."

"The Witness was shown a circular labeled, 'United States Circuit Court of Appeals, 6th Circuit. Toledo Computing Scale Company, appellant, versus Computing Scale Company, appellee,' and said: This circular was prepared in my office at Toledo under my direction, and were mailed out in large numbers to the retail trade and the public generally, continuing through a period of years from 1906 up to the present time."

(This circular was offered in evidence and admitted over objection of counsel for plaintiff and marked Defendant's Exhibit No. 45.)

The witness was shown a colored circular entitled, 'My Best Friend. The greatest money making fixture in my store is the Toledo Honest Weight Springless Scale' to which is attached a paper circular entitled 'The Significance of the famous sign, 'Toledo, No Springs, Honest Weight,' and a postal card entitled, "You Want More Customers,' and said the copy for these circulars was prepared and they were printed in Toledo and mailed from my office here to the trade in general—something like 300,000 of these circulars having gone out during the accounting period. The postal card and the other circulars mentioned were sent out together."

(This circular with attached papers was here offered in evidence and admitted over objection of counsel for plaintiff and marked Defendant's Exhibits Nos. 46*a*, 46*b*, 46*c*.)

"Mr. Meads:

"Q. Mr. Theobald, were there any other features which you embodied in your platform cylinder scale which were not embodied in the so-called Smith Hanging scale?

"A. Yes, another very important arrangement of our cylinder was the manner in which we displayed to the view of the merchant and to the public the exposed portion of the chart."

"Mr. Meads:

"Q. Describe how the opening in your scale through which these readings were made differed either in size or any other way
877 from those in the so-called Smith patent.

"A. The openings in all cylinder scales previous to that time were very narrow—very narrow slots. From the angle in which the operator of the scale read the old types of cylinder scales there was exposed to view only that row of figures immediately above the price per pound. It was the lower position on the chart just adjacent to the prices, but it was higher in value. If you would stoop down and look straight into such a scale, you would observe there was another row of figures at the top of this casing or slot. The real value was somewhere in between.

(The plaintiff here moved to strike out the foregoing answer as irrelevant and immaterial and having nothing to do with the accounting and as a conclusion. The motion was denied."

In the so-called Smith or Boston scale, there was nothing to indicate at which those value figures should be read. To fix the point at which in the revolution of the cylinder the value figures should reach to be read, we made the opening wider, exposing several figures, so that it would not be a choice of one of two, and fixing the one to be read by a definite line, and printing on the scale in plain letters, 'Read only the values indicated by the red line.' This red line ran horizontally the full length of the cylinder in the middle of the opening. When we acquired the De Vilbiss patent for the cylinder computing scale, there were no scales of a cylinder type on the market with a line to indicate where the reading should be made.

"Another of the important features incorporated or instituted by me in the manufacture and sale of pendulum cylinder scales, and which were not in the so-called hanging scale, was the design of our casing enclosing the mechanism, giving it a distinctive design, color and finish, first to make it attractive, but in this casing were openings covered by glass, the covering was to keep it dust proof, but the glass was to expose the mechanism so that the public and the operator would look into the mechanism and see that it contained no springs. Along with this design on the casing, and on specially pre-

pared signs on still others, was a printed notice directing the attention of the public to the springless mechanism. So in this
878 design we combined utility, attractiveness, and a notice to the public that it was a springless scale. That housing protected the working parts of the scale, and prevented any tampering from the outside. In order to prevent any tampering from the outside, or even by the operator, the working parts were enclosed and were not get-at-able except by the removal of several screws. Of course, you could take them out. There was only one wide opening into the housing. That was a slot through which the main lever worked. Beyond that it was dust proof, and the mechanism completely enclosed, so that it could not be tampered with by the operator or by the public. I mean readily. At first the pendulum mechanism only was exposed, then the ends of the cylinders were made of glass so they could look clear through and see no springs in there, as each chart bore the sign, 'No springs.' Also the color and the finish of our scales were made distinctive features. The color originally was blue—a torquoise blue—but as that became more or less common we adopted a special gold design. For this particular color and finish, because of its attractiveness, we charged $15 at one time, and $10 later, just for this particular finish, because of its beauty and attractiveness. We adopted a distinctive color in our blue. Then that was copied by other makers. Then we later on adopted the gold finish color, which was never used before on any scale of any kind or description, and we were absolutely the first to adopt that gold finish.

"Another important device which was not in the so-called Smith hanging scale was the incorporation of leveling feet on the scale, adjustable leveling feet. It is generally known that scales to weigh accurately should set level on the counter, but we did not depend upon the merchant's leveling his scale, but equipped each one of our scales with adjustable leveling feet, also with a spirit level on the scale to show when it was level. Every one of our cylinder scales were equipped with the spirit level, and instructions went with the scale as to how to level it. We were the first to adopt a spirit level upon the platform cylinder scale. Another feature which we incorporated in our platform cylinder scales and which were not part of the so-called Smith hanging scale, was the equipment of a great many of our cylinder scales with an electric illuminating device.
879 The device was so constructed that when a commodity was placed upon the scale, the electric circuit would be closed and the current passed through, re-acting into the lamps, would illuminate the entire cylinder, that is, the side looking out on the merchant. It would illuminate the value, the weight and the prices per pound; on the reserve side it illuminated the indication of weight and a large glass sign reading, 'Toledo—No Springs—Honest Weight,' directing every customer's attention to the question of correct weight. When the commodity was taken off the scale, this light would go out. So the light would flash on whenever a commodity was placed on, and go out whenever it would be taken off, the purpose being to attract the customer's attention to the question

of accurate weight. At the time we acquired this De Vilbiss patent, the so-called Smith hanging scale had never been equipped with electric illumination. For this electric attachment a special and extra charge of $25 was made, independent of everything else, and the device for illuminating our electric scales was the subject of letters patent owned by our company.

The witness was shown a printed copy of the United States patent No. 1,068,616, issued to the Toledo Scale Company July 29, 1913, upon application of L. E. Wetzel. This is the patent that I referred to for our electric illumination.

(This patent, No. 1,068,616, was here offered in evidence and admitted over objection of counsel for the plaintiff, and marked defendant's exhibit No. 47.)

Another feature incorporated in our platform cylinder scale was the great prominence given to the sign borne by each scale, "No springs, Honest Weight," by equipping each scale with such a sign in a prominent position, and by the exploiting of that feature of the scale as one of its principal selling points.

(The statement from "exploiting" to "selling points" was stricken out on motion of the plaintiff.)

On the scales without the electric attachment the word "Toledo" was printed in large letters immediately above the opening in the casing, showing the weight to the customer or the public. Immediately at the left of the opening in the casing showing the weight to the customer was printed in large letters the words, "No springs—Honest Weight," making the sign read in its entirety

880

"Toledo.

No Springs—Honest Weight."

These circulars were prepared by the Toledo Scale Company under my direction in many instances while other circulars were prepared in the field under the direction of salesmen. We went further. Merchants who purchased these scales held "Honest Weight Openings" as they called them, advertised to the trade that they had purchased such scales. I personally know of a large number of these openings though I don't remember of ever having attended a single one, but I know large numbers were held.

"This testimony was objected to by the plaintiff as hearsay."

Advertising matter was prepared by me and used at a large number of these openings. The witness was shown a circular entitled, "The Cost of Eating" and having below in a rectangular division the words,

"Toledo.

"No Springs—Honest Weight."

I prepared this circular in Toledo and many thousands were distributed under my direction to users of Toledo Scales throughout the accounting period.

(This circular was offered in evidence and admitted over objection of counsel for the plaintiff and marked "Defendant's Exhibit No. 48.")

"Mr. Zane: Now, if your Honor please, there ought to be some limit to this advertising matter that is going in here to swell the record. It can't have any effect upon any issue in the case. How can advertising matter divide a scale between parts which are infringing and other parts which are non-infringing? I can't understand that. If the theory were on expense, that might be something, but advertising matter, I give you my word I never heard of that being claimed as any criterion by which to divide a scale or any other mechanism into an infringing and a non-infringing part.

"Mr. Meads: In answer to counsel's objection, the witness has testified they kept a sign on the scale, "No Springs, Honest Weight" and we will show a very large portion of the sales were due to that sign and to no other feature. Here is a circular that perpetuates that sign.

("Discussion.")

"The Master: It is pretty hard for the Master to say just to
881 what extent they can prove a matter of this kind. I will take the testimony.

"(Said circular entitled "The Cost of Eating," so offered received in evidence and marked Defendant's Exhibit 48.)"

"The witness produced a number of paper bags and said they were printed as a general proposition. I mean by that we printed paper bags, for a great many users of our scales under my direction, the paper sack showing the picture of the scale and the "Honest Weight" slogan. These bags were sent to users of the scales in large numbers—many thousands of them. These bags were prepared and printed at Toledo under my direction.

"This was objected to on the additional ground of being advertising for all their scales.

(One of the paper bags entitled "Honest Weight Guaranteed" was offered in evidence and admitted over objection of counsel for the plaintiff and was marked "Defendant's Exhibit 49.)

Then testimony as follows:

Mr. Meads:

Q. Mr. Theobald, will you describe in general all of the cylinder scales which were manufactured by you during this accounting period in the matter of front and rear indications and how those were constructed.

Mr. Zane: Object to that as irrelevant and immaterial, absolutely has no bearing here.

Mr. Meads: This suit was brought by the plaintiff in this case on one of the patents for this rear indication. They assumed it had some value evidently in the constructions of the scale, or they would not have brought suit on it.

Mr. Zane: That patent was not sustained.

Mr. Meads: I am going to show that each one of our scales had that rear indication.

(Discussion.)

The Master: Objection overruled.

(Question read.)

A. All cylinder platform scales made by us had an opening in the casing on the side of the operator of the scale, a glass covered opening, through which was disclosed to the view of the merchant or the operator the price per pound of the commodity being sold, the weight of the commodity on the platter and its value. On
882 the other side of the scale, the back indication, looking outside, to the customer, there was a glass covered opening and immediately under the glass close up to the chart was a reading line indicating the weight to the customer. Every scale made by us was so equipped, both front and back indication.

"Cross-examination.

By Mr. Zane:

"Q. This patent No. 839,726 which has been marked as Defendant's Exhibit 37 was a patent which you acquired under your contract of purchase of July, 1901?

"A. I acquired the invention, the application.

"Q. The cylinder that was incorporated in that patent was a cylinder that stood at right angles to the plane in which the pendulum rotated, didn't it?

"A. The horizontal length of the cylinder was at right angles to the pendulum.

"Q. Now, did you ever make any scales under this patent?

"A. No.

"Q. Did you ever make any scales under this invention?

"A. In experimental models, yes, but not scales.

"Q. But you never made any for sale?

"A. No.
"Q. Now, when did you first begin to make cylinder scales?
"A. For the market do you mean?
"Q. Yes, for the market.
"A. 1904.
"Q. When did you first sell any?
"A. I think in 1905 or 1906, I am not positive as to the first sale.
"Q. That scale which you first made for the market, was that made in accordance with this patent No. 839,736?
"A. In some respects according to the invention claimed, but not in the details.
"Q. The first number of cylinder scale that you made for the market was what of your type numbers of the Toledo Company?
"A. I think it was 344, but I am not positive. 344 or 300, something like that.
"Q. And all those you made afterwards were made on that general model?
"A. Yes.
883 "Q. Now, in 1906 when you first made scales which were cylinder scales were there any scales then in use that had a dash-pot?
"A. Yes.
"Q. What scales were those?
"A. Toledo scales, all the fan type scales from the beginning had dash-pots.
"Q. And in 1906 was there any cylinder scale with a dash-pot?
"A. Yes.
"Q. Who made that?
"A. The Dayton Company made a cylinder scale with a dash-pot.
"Q. That's the plaintiff here?
"A. Yes.
"Q. In 1906 was there any company, when you began to manufacture for sale your cylinder scales was there any company which had a platform cylinder scale?
"A. Yes.
"Q. What company?
"A. Your company, the plaintiff company.
"Q. The plaintiff company?
"A. Yes.
"Q. In 1906 when you began the manufacture of cylinder scales for sale was there any cylinder scale made with springs which had a compensating mechanism called a thermostat for automatically regulating contraction and expansion owing to changes in temperature?
"A. There was a scale made that purported to have a device that would, such as you said.
"Q. That device was called a thermostat?
"A. Thermostat, the Dayton scale made by the plaintiff in this case.
"Q. Now, you have testified that you never manufactured any hanging cylinder scales?

"A. We did not.

"Q. You could not manufacture with your pendulum counter-balancing device a hanging scale, could you?

"A. Yes, have one about ready for the market now.

"Q. What was the use of the level upon your scale?

"A. To level the scale upon the counter, to enable the merchant to level his scale on the counter.

"Q. You had a level both for length and for width, didn't you?

884 "A. Not originally.

"Q. What was your original level?

"A. We had a level from front to back is my recollection, from front to back.

"Q. That was what you called the thickness?

"A. That would be the depth from front to back.

"Q. And you afterwards put on a level for length of scale?

"A. Yes.

"Q. For the pendulum scale to operate properly it must be on the level?

"A. Why, it is about the only scale that don't require the level lengthwise, but it requires the level from front to back, but the pendulum served as a level in the other direction.

"Q. If the deviation from the level was in the direction of the length precisely——

"A. Yes.

"Q. —it would make no difference, but if the deviation from the level was in any other direction than the length of the scale, it would make a difference, would it not?

"A. Yes, from front to back.

"Q. Well, it would make a difference if the deviation from the level was in a longitudinal direction?

"A. Yes, I should say so.

"Q. Now, have you devised for a hanging scale a pendulum counter-balance?

"A. Yes.

"Q. And have you devised a method for keeping that scale level on your hanging scale?

"A. Well, I imagine so. It is a new device.

"Q. But as a hanging scale it would necessarily have to hang on the level, would it not?

"A. One would think so. No, it should hang in such way as to remain in balance.

"Q. Yes.

"A. But it would not necessarily have to hang that way unless it was constructed to do so.

"Q. Now, the dash-pot for overcoming the oscillation of a scale was an old device, was it not, the dash-pot itself?

"A. No, not in connection with the scale, no.

"Q. Well, it was an old device in 1906, was it not?

"A. In 1906 it was, yes, but not when we patented it.

885 "Q. I am asking you about 1906 when you began to manufacture cylinder scales for sale?

"A. Yes.

"Q. That was an old device?

"A. We had used it for years previous to that time on our fan scales, but it was new with our fan scales.

"Q. And at that time you say it was being used on a platform cylinder scale by the plaintiff in this case?

"A. The plaintiff in this case first used an air dashpot, but discarded that and adopted the dash-pot.

"Q. But do you know when that date was?

"A. No, I don't know the definite date.

"Q. In 1906 when you began the manufacture for the market of cylinder scales was there any cylinder scale incorporating a chart where the space of the ground graduate was divided into as many parts as there are cents in the price per pound?

"A. There may have been a few because of the decision of the United States Court——

"Q. I am not asking you that, I am asking you the fact.

"A. I want to locate the date.

"Mr. Zane: I object to the statement of because.

"A. I don't know then. The only answer I can give you is I don't know, but I do know that the decision of the United States Court was rendered in 1906, and up to that time very few, if any, spring scales were equipped with honest charts, with correct charts or charts graduated in the manner you describle.

"Mr. Zane: I move to strike out 'honest charts, correct charts'.

"A. Well, charts equipped in the manner you have described.

"Q. Then I understand you to say that so far as you know, you are not able to say whether in 1906 when you began the manufacture for sale of cylinder scales there were cylinder scales being manufactured and sold that contained a chart where the pound graduate was divided into as many parts as there are cents in the price per pound?

"A. I can't say the way that they appeared in spring scales. It would be impossible for me to say so, but I can say——

"Q. Just wait a minute. Do you remember the plaintiff's scale No. 131?

"A. No. 131? I have heard of that number, yes.

886 "Q. Do you know that that was a scale where the chart was divided for the pound graduate into as many parts as there are cents in the price per pound?

"A. I would not remember without reference to it.

"Q. Don't you know that on the hearing in the first case tried in the United States Court at Cincinnati there was a Dayton cylinder scale offered in evidence where the chart was constructed on the principle of dividing the pound graduate into as many parts as there are cents in the price per pound?

"A. I do not remember that at all. I do remember this: At the hearing in Cincinnati the Dayton scale tendered was one that I submitted. I carried it myself into the court room and set it on a table in front of the judge's bench and it was my own scale, one of the plaintiff company's make, submitted by me.

"Q. Platform cylinder scale?

"A. Yes, and that was not of the type you describe, and that was the only scale demonstrated to the court at that time.

"Q. Do you remember when the Omaha hearing was?

"A. Yes.

"Q. That was in December, 1906, was it not?

"A. Well, I don't know the date, but I remember the occasion.

"Q. Do you remember at the Omaha hearing there was a Dayton cylinder scale put in evidence where the chart was divided for the pound graduate into as many different parts as there are cents in the price per pound?

"A. I don't remember, but I am willing to be shown.

"Q. You don't remember that?

"A. I don't say there was not, you understand. I don't remember it. I do remember of personally demonstrating to Master Morseman a scale of the other type.

"Q. Now, previous to that time the chart where the pound graduate was divided into as many parts as there are cents in the price per pound was in common use, was it not?

"A. On other types of scales, yes.

"Q. The dial shaped scale?

"A. Yes.

"Q. The so-called fan scale had a chart of that character?

"A. Yes.

887 "Q. It coud not have a chart of any other character, could it?

"A. Yes, it could have had easily.

"Q. On that chart of the fan shaped scale there would have been room enough to put the different values at a price such as thirty cents per pound for the different parts of a pound?

"A. I don't know. That was your question.

"Q. Do you say it could be done.

"A. I don't say that that could have been done.

"Q. On the fan chart at five cents a pound the pound graduate was divided into five parts, was it not?

"A. Yes.

"Q. And each part represented a cent in weight?

"A. Not always, sometimes they were divided by two cents.

"Q. Wherever it was divided according to cents in the price per pound each mark represented one cent?

"A. Some pounds were divided by one cent basis, other pounds were divided by two cents basis and other pounds by five cents basis.

"Q. When you got out to thirty cents per pound on the outside of the chart the division was fifteen cents basis?

"A. In some scales and some not.

"Q. Yes.

"A. And each division designated its position accurately and arithmetically, located with arithmetical precision.

"Mr. Zane: We move to strike out this last statement.

"The Master: That may be stricken as not responsive.

"Mr. Zane:

"Q. So in that type of chart when you weighed, so far as the weighing was concerned you weighed in the parts of a pound which corresponded to the number of cents in the price per pound, didn't you?

"A. I don't understand the question.

"Q. (Question read.)

"A. I don't understand the question.

"Q. Very well. Now, take the other type of chart, that purported to have on it the calculated values for the weight at the particular price per pound, didn't it?

"A. What type of chart are you talking about?

"Q. I said the other type of chart?

"A. Do you mean a cylinder chart?

"Q. You have spoken of two types of charts. The first type of chart, as you said, was a chart where the pound graduate
888 was divided into as many parts as there were cents in the price per pound. You also testified in your direct examination to another type of chart.

"A. Yes. But you must realize that we have been talking for the last few minutes about a fan scale.

"Q. Yes. Now, the other type of chart is a chart where value figures are put on the chart opposite indications of weight?

"A. Yes.

"Q. For instance, if the price is eight cents a pound, opposite the weight indication for two ounces in the first pound will be the figure "1," won't it?

"A. Yes.

"Q. Opposite four ounces will be the figure "2," two cents?

"A. Yes.

"Q. Opposite six ounces will be the figure "3"?

"A. Yes.

"Q. For three cents?

"A. Yes.

"Q. Opposite eight ounces will be the figure "4" for four cents?

"A. Yes.

"Q. And so on up to eight cents for one pound?

"A. Yes.

"Q. Now, on that chart you stated that opposite the eight ounce weight indication at nine cents a pound, in the column for nine cents a pound, would be the figure "5"?

"A. Yes.

"Q. That would be for five cents?

"A. Yes.

"Q. Now, in putting those figures upon the chart was this rule followed, that where the calculation resulted in a fraction of a cent if the fraction was a half cent or more, it was called the next highest whole cent, but if the fraction was less than half a cent, it was called the next lowest whole cent, was that the rule followed?

"A. That was the rule that was followed. That was the rule that was followed in the physical placing of the figures on the chart.

"Q. That's what I am asking you about and about nothing else. Now, was it true that on that chart that within that rule all
889 the figures placed opposite weights were correct calculations for that weight at the price per pound?

"A. If weighing a chunk——

"Q. I am asking you simply about the calculation.

"A. Yes, disregarding the fraction, I should say yes.

"Q. That is to say, opposite the half pound, that is, the eight ounce indication, at nine cents per pound was put the figure "5"?

"A. Yes.

"Q. A half pound at nine cents was four and one-half cents?

"A. Yes.

"Q. The rule was applied to that figure and the four and one-half cents was called five cents and that was put on the chart?

"A. Yes, but——

"Q. I am not asking you anything more than the calculation?

"A. But let me explain.

"Q. I am not asking you about that. We are not going into the merits of the chart, but we are going into what they are.

"A. I will say yes, but I will also say opposite four cents a pound "1" appeared and you were still two ounces short.

"Mr. Zane: We move to strike out his answer as not responsive.

"The Master: Motion allowed.

"Mr. Zane:

"Q. So if in that same column at nine cents a pound you had four ounces what would be the calculation of four ounces at nine cents a pound?

"A. What would be the figure on the chart?

"Q. What would be your calculation?

"A. 4/16ths of 9, a quarter of 9.

"Q. Yes.

"A. That would be 2¼.

"Q. 2¼ cents?

"A. Yes.

"Q. What figure would you put on the chart?

"A. We did put the figure "2" on the chart, but it should not have been so placed.

"Mr. Zane: I move to strike out his statement.

"The Master: That may be stricken.

"Mr. Zane: That is to say, the calculation gave 2¼ cents?

890 "A. Yes.

"Q. And under the rule the quarter cent being less than the half cent was disregarded and it was carried as two cents?

"A. Yes.

"Q. Now, it was on that principle that the chart was constructed?

"A. Yes.

"Q. Now, do you say that that kind of a chart could be put in a fan shaped scale?

"A. Yes.

"Q. I mean as a feasible proposition of a scale readily read?

"A. I should imagine so, yes; yes, without any question of a doubt.

"Q. Did you ever know of a fan shaped scale that was made with a chart where the value figures were placed for particular weights?

"A. I should say not.

"Q. Now, when did you begin to distribute the circular which has been marked Defendant's Exhibit 40?

"A. Some time in 1906.

"Q. And you kept it up through 1907?

"A. Yes, I think we distributed that through 1907.

"Q. 1908?

"A. I think so.

"Q. 1909?

"A. I imagine we did. I can't tell how long we continued to distribute it, but we distributed that as far as I know throughout the years since that time. It has been distributed to a greater or less extent.

"Q. Yes. And in all that length of time what's your best judgment as to the number of copies distributed?

"A. I don't know, Mr. Zane. Many thousands.

"Q. Many thousands.

"A. I should judge so.

"Q. And the cost and expense of distributing that circular went into your expense under the head of advertising?

"A. Yes.

"Q. And was entered in your books under the head of advertising expense?

"A. I should judge so.

"Q. Now, in this circular anywhere is there any statement
891 in regard to the scale made by the Toledo Scale Company or the Toledo Computing Scale Company?

"A. By inference only.

"Q. There is no statement that you can find or show to us there which says anything in regard to the making or construction of the Toledo Scale?

"A. Yes, I say by inference.

"Q. What do you refer to?

"A. On page 2 (reading) 'When the Toledo Computing Scale Company began making scales, we operated as a matter of course, upon the principle that a scale must, of necessity, be accurate and honest.' In the next paragraph, 'Later we found upon the market many barrel shaped, spring balance computing scales like those shown on the first page of this circular which are neither accurate nor honest."

"Q. In that circular did you say anything about your cylinder scales?

"A. No, not in this particular circular we did not.

"Q. Was not that circular put out before you put out your cylinder scales to the trade?

"A. I don't think it was, not this particular one, because this circular was put out in 1906 and that's about the time we began to sell our cylinder scales, so if it was before it was just immediately before. It could not have been long before.

"Q. Now, Mr. Theobald, you know when you began the manufacture for sale of cylinder scales, don't you?

"A. Not the exact date, I don't know, but the year 1906.

"Q. Well, come within a month of it.

"A. I can't come within a month of it. It was in the year 1906, I really do not know.

"Q. Was it in the latter part of 1906?

"A. I really don't know that. That can be ascertained if you want it.

"Q. Do you remember making an affidavit in this case in which you stated this: 'Your petitioner further represents and shows that soon after it began to place said scales extensively upon the market, to-wit, in the month of March, in the year 1907'?

"A. No, I don't remember making that affidavit.

"Mr. Meads: I object to that form of question. That statement says after he began to do it extensively.

"The Witness: The affidavit will speak for itself.

892 "Mr. Zane:

"Q. Are you able to fix the time when you began to manufacture scales for sale that were cylinders?

"A. I imagine I could.

"Q. How long will it take *it?*

"A. I really don't know, I don't know how long it would take me.

"Q. I wish you would fix that date for us.

"A. Very well. I may not be able to fix it definitely. I will make the best investigation I can and give you what I have found out. I would not know out of my own head.

"The Master: Do you want him to do it now?

"Mr. Zane: Yes.

"The Witness: All I can do would be to make an investigation of the record.

"Mr. Meads: It is within fifteen minutes of adjourning time. He can get it tonight.

"Mr. Zane: All right.

"Q. Now, during these years, 1908, 1909, and 1911 when you were sending out these circulars, Defendant's Exhibit 40, you were reconstructing in your factory Dayton spring computing scales and selling them again, were you not?

"A. Part of the time.

"Q. Part of that time you were?

"A. At first we broke them all up.

"Q. Now, when did you begin that?

"A. I don't know.
"Q. Can you fix that time?
"A. I don't know.
"Q. Now, look at the circular, Defendant's Exhibit 42, and tell us where in that circular you find any reference to the good qualities of the Toledo Cylinder Scale?
"A. There is no reference to Toledo cylinder scales here that I can see.

Q. Now, the circular which is marked Defendant's Exhibit 41, which you said you had distributed in numbers more than thirty thousand during the years from 1907 up to the time of the accounting period, the expense of that advertising went into the general expenses of the business as part of the advertising, didn't it?
"A. Yes.
"Q. And the same is true of Exhibit 42, is it not?
"A. Yes.

"Q. In what quantities did you distribute Exhibit 42?
893 "A. I do not know, but I know that we distributed many thousands of them.
"Q. Beginning when?
"A. Well, I think there was several issues of that circular. I think that particular copy, I can't say when it began and when it ended, but that began before the period and was continued pretty much throughout the period I guess.
"Q. That began before the accounting period and continued throughout the accounting period?
"A. I would not say throughout, but it was more or less, right along from year to year to a more or less extent, but I would not say throughout the accounting period, but for a period of years. I can't tell how long.
"Q. But some time during the accounting period you distributed large quantities of that circular?
"A. Yes.
"Q. The same was true of Defendant's Exhibit 43, was it not?
"A. Yes.
"Q. And the same was true of Defendant's Exhibit 44?
"A. Yes.
"Q. And the same was true of Exhibit 45?
"A. Yes.
"Q. And the expenses of all this distribution went into your accounts as advertising expense?
"A. Yes.
"Q. And the same was true of Defendant's Exhibit 40, was it not?
"A. Yes.
"And these circulars were distributed in Canada also, were they not?
"A. No, I think not, not to any great extent anyhow.
"Q. Were they distributed to some extent over there?
"A. Well, if so, to a very limited extent.
"Q. You are not able to tell us about that?

"A. Not definitely, no, I would not be able to do so.

"Q. Now, in 1906 when you began the manufacture for sale of cylinder scales was there any cylinder computing scale then being made and sold that had the wide opening on the operator's side?

"A. I don't know, I think not, or if so, if had been of a very recent origin.

"Q. You are not able to say?

"A. Not definitely. I can say definitely that if so it was
894 of very recent origin at that time, if such existed it was of very recent origin.

"Q. Don't you remember that cylinder scale with wide opening before Master Morseman in December, 1906, out at Omaha?

"A. No, I testified a little while ago I didn't remember that.

"Q. No, that was the chart I asked then. Now I am asking you about the wide opening.

"A. No, I don't. It is possibly peculiar I should not, but I don't.

"Q. Well, when you began the manufacture of cylinder scales were there any scales which had the line run across the opening so as to show the fact that for an indication by the scale that line should bisect a row of figures?

"A. No, I think that came after ours.

"Q. Is that your recollection?

"A. It probably came after. It didn't come until after the absence of the line was assailed by us, that I do know. We forced that issue, that I do remember distinctly.

"Mr. Zane: Move to strike out "we forced that issue" as not responsive.

"The Master: That may be stricken.

"Mr. Zane:

"Q. Go back in your recollection and see if you can recall whether or not a line was put across the hanging chart before you began the manufacture of cylinder scales.

"A. I can't recall. It might have been.

"Q. Might have been?

"A. I won't say it was not. I can't recall the date.

"Q. On the original Smith scale as you recall it back in 1901 was not there an indicator showing when the scale was reading a particular weight, was not there a small pointer?

"A. Yes, a little pointer showing the weight only.

"Q. Showing the weight?

"A. Yes, sir.

"Q. And the figures on the chart were in direct alignment with the weight?

"A. Yes, but the line didn't extend across you understand.

"Q. We have already asked about that, Mr. Theobald. Now, when did you first have your gold color for scales, when did you first get that up?

"A. I really don't know the year we began that.

895 "Q. Well, come as close to it as you can; well, get it to-night, show us when you began.

"A. I think that would be the better plan. Let's make the investigation and get it exact.

"Q. Let's find out when you got that gold color out. Now, in your scale, the cylinder Toledo scale, you had a lever on the scales that were originally made, did you?

"A. My recollection is that we had it on from the beginning. I don't believe any went without it.

"Q. Now, of course a spring scale does not need a lever on it at all?

"A. Oh, yes, it does.

"Q. You think it does?

"A. I should imagine so, just as much so as others. I think the regulations require it now, don't they?

"Q. Does the platform, whether it is a little one way or the other make any difference with a spring scale?

"A. Yes, it does affect the weight.

"Q. Now, when did you first begin to equip scales with any electric lighting device?

"A. I will have to get that date for you definitely. I don't know.

"Q. You can't give us that?

"A. Not out of my head, no.

"Q. When did you first begin to equip scales with glass ends in the cylinder?

"A. That I cannot say.

"Q. Well, will you look that up also?

"A. Yes. I don't know whether we can find that, but we will make an effort to find it. We have done it for years.

"Q. Well, show us too the written evidence by which you make your statement, if you do make any.

—. ——.

"Q. Now, have you found the dates that you were asked in regard to?

"A. Well, I have had an investigation made. What's the first one you want?

"Q. The date when you began the manufacture of cylinder scales.

"A. The first cylinder scale as made for the market was exhibited in the Universal Exposition 1904. It seems that the first one I can find as having been shipped to a customer was in October, 1906.

896 "Q. So it was in the latter part of 1906 that you began to manufacture for sale?

"A. That we began to ship.

"Q. Well, I want to know when we began to manufacture.

"A. Well, they must have been manufactured slightly previous to that time, both manufactured and shipped, yes.

"Q. That would be according to your judgment as near as you can come to it, October, 1906?

"A. Yes, October.

"Q. And a little before that?
"A. Some time before.
"Q. How long before? How long before would you think?
"A. I imagine August.
"Q. August, 1906?
"A. Yes.
"Q. Now, the next date you were asked about was when you first began to put on the yellow color.
"A. Gold finish. As near as I can learn or ascertain I should say the first gold finished scale was shipped in February, 1907.
"Q. You were still making at that time the blue finish——
"A. Yes.
"Q. And you continued to make the blue finish?
"A. Yes.
"Q. Now, the next was the electric light attachment. When was that?
"A. November, 1910, seems to be the first electric light.
"Q. Now, you put the electric light on certain scales and other scales were without the electric light?
"A. Yes.
"Q. Now, when you began in November, 1910, to put the electric light in the scale were there other scales being made, other kinds of scales being made that had the electric light attachment?
"A. Yes.
"Q. By whom?
"A. By the Dayton Company and I don't know whether there were any more at that time or not.
"Q. And by the Dayton Company you mean the complainant?
"A. Yes, the Dayton Company. What is the complainant to this case, Moneyweight or Dayton?
897 "Q. Computing Scale Company.
"A. Computing Scale Company.
"Q. Was that circular Exhibit 41, circulated in Canada?
"A. I do not know.
"Q. Was that circular, Exhibit 42, circulated in Canada?
"A. I do not know to what extent, if any.
"Q. Now, was the circular, Exhibit 43, circulated in Canada?
"A. I imagine to a limited extent all these circulars have gone there to possibly our salesmen in our offices, but whether or not these circulars have had any general distribution in Canada or to the trade I am unable to say.
"Q. Now, Exhibit 43, did I ask you before how many copies of that you had circulated?
"A. I think not. I do not know whether you did or not.
"Q. Well, how many?
"A. I do not know.
"Q. Well, approximate it?
"A. I do not know.
"Q. In large numbers?
"A. In reasonably large numbers I think.

"Q. Now, the circular, Exhibit 44, was that circulated in Canada?

"A. I am unable to say.

"Q. Well, do you know whether any copies were sent up there or not?

"A. I imagine some must have been sent to our salesmen because it is our policy and practice to send to our salesmen a sample or a reasonable supply, a sample supply I should say of all circulars for their information and instruction, but we did not always distribute in Canada what we distributed in the United States and I can't tell from looking at the circular whether or not it was sent into Canada.

"Q. Do you know whether or not the part of Exhibit 44 that's marked Exhibit 44*a* and 44*b*, being facsimiles of newspaper articles, were always sent out with that circular?

"A. I assume they were always sent out.

"Q. I say do you know?

"A. I do not know positively that they were except that was the way the circular was to go out in its entirety.

"Q. It is a separate sheet.

"A. But always supposed to be enclosed in that circular.

"Mr. Zane: I move to strike out the answer. I asked him if he knows.

898 "The Master: He says he does not know positively but that it was the policy and course of business as I understand it.

"Mr. Zane: Yes. I move to strike out "It was supposed to be sent."

"The Witness: Well, it was the intention and I ordered that they should be sent and I assume of course they were sent.

"Mr. Zane: Now, I move to strike out his statement that it was the intention and that he assumed that they were sent.

"The Master: I think the testimony may stand.

"Mr. Zane:

"Q. Now, as to Exhibit 45, was that circulated in Canada?

"A. A reasonable number I imagine. I know they went to our salesmen and our offices in small quantities, but I can't tell whether they were distributed to the trade in large numbers from recollection.

"Mr. Meads: You mean in Canada?

"A. In Canada I can't tell, of course in Canada.

"Mr. Zane:

"Q. Now, have you any idea how many circulars like Exhibit 45 were distributed, in number?

"A. You mean in the United States anywhere?

"Q. Yes.

"A. A large number, I should say several thousand but I can't tell the exact number.

"Q. What do you mean by several thousand?

"A. I should say three or four, possibly five thousand and possibly more, but I should imagine three or four thousand anyhow, but that I can't tell from my memory.

"Q. Was Exhibit 46 with its accompanying papers, 46*b* and 46*c*, circulated in Canada?

"A. I do not know.

"Q. Well, what is your idea of it?

"A. I do not know. I can't say. I doubt if it was. It may have been. It is impossible for me to say.

"Q. Now, in October or August, 1906, when you began the manufacture of cylinder scales was there any other scale than your own using the wide slot for the exposure of the price value?

"A. I think there may have been to a limited extent, but I doubt it, because the wide slot was a matter of issue in the Cincinnati contention and that decision was rendered in 1906. I have
899 no way of fixing the date that other companies adopted the wide slot, so it is not possible for me to testify out of my memory.

"Q. At that time in August or October, 1906, were there any other makes of cylinder scales using the line across the slot to indicate?

"A. I do not know, I really do not know, I can't say when they adopted the line. I do know that the narrow slot without an indicating line was a matter of contention. We had protested for years against the use of such scales.

"Mr. Zane: I object to this. It is not an answer, and move to strike it out.

"The Master: Strike it out commencing with the words "I do know that the narrow slot."

"Mr. Zane:

"Q. In August or October, 1906, when you began the manufacture of cylinder scales were there cylinder scales of other makes or another make with glass ends to the cylinder?

"A. I guess not. I can't recall of any. There might have been and might not. I don't know of any.

"Q. How long after you began the manufacture of cylinder scales did you put in the glass ends?

"A. I can find that out possibly by reference to our records.

"Q. Give us your judgment about it?

"A. It was some years.

"Q. How many years after?

"A. Probably two or three, I really don't know when we put on the glass ends, but I could find out if you want to know definitely.

"Q. We would like to know that.

"A. All right, we will ascertain. I imagine we can find out. (Examining bound volume.) May, 1910.

"Mr. Meads: That's the first shipped. Of course, you manufactured shortly before that?

"A. Yes, the first shipment to a customer. In my answer I am referring to the manufacture and sale of these scales and delivery to customers.

"Mr. Zane:

"Q. Now, after that, May, 1910, you continued to make scales without glass in them, exposing the mechanism of the scale?

"A. Yes, at a less price generally.

"Q. Now, when you began the manufacture of cylinder
900 scales were there other makes of cylinder scales that had on the customer's side of the cylinder an opening exposing the weight on the scale?

"A. Yes.

"Q. Now, you spoke of two kinds of leveling instruments you had on your scale, one was the adjustable leveling feet and the other was a spirit level. Now, the adjustable leveling feet were how many in number on the scale?

"A. There were not two kinds of leveling devices. The adjustable feet were for the purpose of leveling the scale and the spirit level was to show when it was level, and there were three feet, three adjustable feet.

"Q. When did you put the second level on the scale?

"A. Only in recent years.

"Q. Well, about when?

"A. Well, I don't know definitely, but I should say within the last two years say.

"The Master: You mean the spirit level?

"A. No, no. Which other level do you refer to?

"Mr. Zane:

"Q. You said you had two?

"A. No, I didn't say we had two means of leveling our scale.

"Mr. Meads: Answer the Master's question. The Master said "Do you mean the spirit level?"

"A. We always put on a spirit level from the beginning. We had adjustable feet to level the scale and the spirit level mounted in the base only to show when it was level, because no man could tell from his eye. There was no need in our scale of a side wise spirit level because the pendulum when it brought the indicating line to zero determined that question.

"Mr. Meads: The pendulum was like a plumb bob, was it not?

"A. Yes, but within the last two years the weights and measures officials at Washington requested and conceived the idea that spirit levels should be put both ways, as I understand it, and since that request we have been putting a spirit level both ways although at the time we pointed out that on our pendulum scales, both fan and cylinder——

"Mr. Zane: We object.
"The Master: Well——

"Mr. Zane:

"Q. Now, your second spirit level was put on within the last two years?

"A. Within the last two years.

901 "Q. Now, this small circular, Exhibit 48, did you distribute that in large quantities?

"A. Yes.

"Q. Can you give us any idea of the number?

"A. No.

"Q. Was that distributed in Canada?

"A. I do not know.

"Q. What do you mean, you do not know?

"A. Because I can't from my memory tell where any particular circular was distributed, that is, any particular locality or country, and I can't conceive of a mind that could.

"Q. This circular, Exhibit 49, which consists of a paper bag, was that distributed in quantities?

"A. That was submitted as only a type.

"Q. Of the advertising?

"A. A type of a general plan of advertising. That paper bag of course was restricted to such distribution as was made of it by the man whose name is on it, by the merchant, but we printed those bags for many merchants as a general scheme and system of advertising.

"Q. And that printing went in as a part of your advertising expense?

"A. That printing went in as a part of the advertising expense showing a picture of the scale and the guarantee of honest weight given by the scale.

"Q. As well as all these other circulars, went in as a part of the advertising expense?

"A. Yes.

"Q. On these bags?

"A. I might add, however, that for many of these paper sacks the merchants paid, so, what percentage of that went into our general costs I do not know and would be unable to say, but for a large number of them the merchants paid.

"Q. Were these paper bags used and circulated in Canada?

"A. I do not know. They must have been sent to our salesmen along with samples of everything else.

"Q. Well, you printed them for particular customers, didn't you?

"A. Yes.

"Q. Now, you look at that (handing witness Exhibit 49).

"A. This is a Canadian one.

"Q. That's printed for Canada?

902 "A. For Canada and it may be the man paid for it, I don't know.

"Q. Now, you said you could not tell whether this small circular, Exhibit 48, was circulated in Canada. Look at it and see whether it is not a Canadian circular.

"A. No, it is not.

"Q. What's the words on it.

"A. "Toledo Scale Company, makers of honest scales, Toledo, Ohio, U. S. A., Canadian factory Windsor, Ontario," but that does not denote that it was a Canadian circular. We put the Canadian factory on almost all our advertising matter. In fact, we aim to get it on all of it. That's merely an advertising statement. Furthermore I have not undertaken to say these circulars have not been distributed in Canada. I have only said I don't know which ones have been and which ones have not.

"Q. They may have all been so far as you know?

"A. They may have all been so far as I know at this time without investigation.

"Mr. Zane: That's all.

Redirect examination.

By Mr. Meads:

"Q. Mr. Theobald, in answer to a question propounded to you by counsel for the plaintiff yesterday when submitting to you Defendant's Exhibit 37 you made the statement that you never made scales under the patent, Exhibit 37. Do you wish to correct that statement?

"A. I had no thought of making such a statement.

"Q. Assuming now that you did make such a statement, do you wish to correct that statement?

"A. I certainly do because every cylinder scale we have made has been constructed under that patent. The question that was asked me——

"Mr. Zane: We object.

"Mr. Meads:

"Q. If you misunderstood the question of counsel, state what you thought counsel asked.

"A. Counsel asked——

"Mr. Zane: We object to this as incompetent.

"Mr. Meads: I think we have a right to know what he thought he was answering.

"The Master: He has made a correction. He says he didn't understand such a question was asked in the way your question indicates.

903 "Mr. Meads: I think the witness has a right to state and the court should know what question the witness thought counsel propounded so that the court may see what was in the mind

of the witness in order to see whether the witness is honest in his statement of correction.

"The Master: The question is, as I understand it now, what question he thought Mr. Zane asked.

"Mr. Meads: Yes.

"Mr. Zane: We object to that. It just goes into a collateral inquiry and his construction and so on. He stated he didn't mean to answer that way and he stated in addition that every cylinder scale that they have made was constructed under this patent.

"The Master: To say that he didn't mean to answer that way may not give the correct attitude of the witness. He may have intended to answer exactly as he did answer, but may have misunderstood the question. You may state what question you supposed was asked you.

"Mr. Zane: Exception.

"A. When I said no, that we did not make our scales under that patent I thought my answer was a statement that we did not make our platform and cylinder scales with the cylinder mounted at right-angles to the plane in which the pendulum travelled which is the plan shown in the drawings, and when I said no I meant just that and had no thought or intention of conveying the impression that we did not make our scales under that patent.

"Mr. Zane: Now, I move to strike out this statement that scales were made under that patent as stating a legal conclusion.

"Mr. Meads: That's the question counsel propounded to him.

"Mr. Zane: I might ask the question on cross examination, but they can't ask it.

"Mr. Meads: He has the right to correct his answer to a question which counsel propounded.

"Mr. Zane: If the court rules that way, he has a right to correct his answer, but to go on and say that every cylinder scale they have made was constructed under that patent is a statement of a bald, legal conclusion and we object to it and move to strike it out.

"The Master: That portion of his answer may be stricken out as not responsive to the question.

"Mr. Zane: That's all the questions.

904 Now, I will reserve a motion which we are going to make to strike out certain testimony. I will make it a little later.

"Mr. Meads: I would rather argue it when the witness is here, so as to see whether there is something else we want to cover.

"The Master: You mean while you are still at Toledo?

"Mr. Zane: Yes.

"The Master: Counsel says he will make it while he is here, so if it is necessary to recall the witness you will have the opportunity to so so while we are here."

Mr. Zane: Your Honor, there is a motion we were to make in regard to striking out certain testimony and this is the motion we make now.

The plaintiff moves to strike out the following exhibits and the following testimony of Henry Theobald and the testimony of witnesses bearing upon the following particular points upon the following grounds: Exhibit 40 of the defendant and all testimony as to the arrangement of figures on the chart of the drum which were offered to show advertising to advance the sale of defendant's scales in connection with the claim that the arrangement of figures on the chart was a feature of the scale to which a part of the profit on the scale was attributable. The said Exhibit 40 of defendant is incompetent, irrelevant and immaterial for the following reasons:

First, that it is not advertising of defendant's scale at all even on the defendant's own claim. It does not mention defendant's scale as the witness Theobald admits, but is a wholly irrelevant attack upon another scale and was matter in evidence on the main issue settled by the Circuit Court of Appeals.

Second, that the advertising is as to no feature of the indicator drum as a mechanism, but simply as to the mere arrangement of figures upon the chart which mere arrangement of figures upon the chart does not constitute a part of the mechanism of the indicator drum.

Third, that the arrangement of figures on the chart is wholly immaterial as to the patent infringed.

Fourth, that the said Exhibit 40 of defendant, claimed to be advertising, raises a wholly collateral issue as to the propriety of the arrangement of figures on the chart which issue is absolutely
905 immaterial to the accounting and has been before the court in the issues already decided.

Fifth, that advertising of whatsoever character is an expense fully compensated in the allowance of expenses.

Sixth, that as to the claim that the arrangement of figures on the chart gave a part of the profit on defendant's scale, the evidence in regard thereto and the said Exhibit 40 are wholly immaterial because such a feature on any scale was open to the public and did not in a legal sense produce any part of the profit which profit in the legal sense was wholly due to the indicator drum. That's the objection to Exhibit 40 and the evidence with which it is offered.

Exhibit 42 is objected to for the reason that it is a circular and objected to for the very same reasons as Exhibit 40, it is a circular of the same kind.

Exhibit 43, purporting to be a reprint of a court decision, is objectionable for the same reason as Exhibit 40 and is itself wholly incompetent.

Exhibits 44*a* and 44*b*, offered in connection with Exhibit 44, and purporting to be fac similes of newspaper articles, are wholly incompetent in themselves and objectionable for the same reasons as apply to Exhibit 44.

Exhibit 45 is objectionable because it purports to be a reprint of a legal opinion and is objectionable for the same reasons as Exhibit 43, another reprint of a court opinion as it is claimed.

Exhibit 46 is objectionable for the same reason as Exhibit 40 as raising an immaterial and collateral issue by an attack upon a particular arrangement of figures on the chart in some other scale,

and the whole matter of Exhibit 40, of Exhibit 42 and Exhibits 44*a* and 44*b* is nothing but hearsay.

Now, all the foregoing exhibits, and adding thereto Exhibit 41, Exhibit 44, Exhibit 46, Exhibit 48 and Exhibit 49, are objectionable because they are offered as advertising matter which cannot be considered in a legal sense as producing any part of the profit on the defendant's scale entitling the defendant to a deduction from profits for any part of such assumed profit even if it were proven, such advertising belongs to the expense of the selling of the scales.

Exhibit 37 now is objected to because it is a copy of a patent showing by its claims a pendulum in connection with a particular
906 weighing mechanism and it is immaterial for the reason that the pendulum itself was not patented, was open to the public and is in combination with the indicator drum, and the whole mechanism was an infringement of the plaintiff's patent and is therefore immaterial.

Exhibit 38 is objected to and move to strike out because it purports to be a copy of a patent showing a dash-pot in connection with a weighing mechanism, and it is immaterial for the reason that the dash-pot itself was not patentable and was not patented and was open to the public and is in a combination, and Exhibit 38 is objectionable for the same reasons as Exhibit 37.

Exhibit 39 is objectionable and move to strike out for the same reasons as Exhibit 38.

Now, Exhibits 35 and 36 which purport to be transfers in some way concerned with the patents that have been heretofore objected to are immaterial as showing transfers of patents which are themselves immaterial.

Exhibit 47 is objected to and is immaterial for the reason that it purports to be a copy of patent for an electric light in combination with other mechanism. It is objectionable for the same reasons as the foregoing patents and the patent itself was granted July 29, 1913, after the accounting period, and could give no exclusive right before that time even if it was for the electric light alone. The electric light itself was a feature open to the public and all the parts of it were, as testified to by the witness, bought in the open market.

Exhibits 59 and 60 which purport to be copies of patents are objectionable and are moved to be stricken out for the same reasons as Exhibit 47, and those patents also were granted long after the accounting period.

As to all of these patents we make the objection that not one of them could be used with an indicator drum until the expiration of Plaintiff's patent and therefore they are here immaterial.

The plaintiff also moves to strike out all the foregoing testimony and testimony as to the foregoing points upon additional grounds. The points that are objected to and as to which the testimony is moved to be stricken out are:

First, the wide slot in defendant's infringing cylinder scale.
907 Second, the distinctive design, color and finish thereof.
Third, the adjustable leveling feet.
Fourth, the spirit level or levels.

Fifth, the electric lighting device.

Sixth, the opening in the front and rear of the cylinder enclosing the indicating drum.

Seventh, the arrangement of figures on the chart.

Eighth, the shipping pins,

and the objection is to each one of these separately for the reasons that each one of these features were mere modifications of the weighing mechanism, nor were they in themselves patentable devices of some other patent appropriated by the defendant, and the same were open to the public and were not in a legal sense features for which the defendant could claim a part of the profit upon the scale, and the adjustable leveling feet and the spirit level or levels were features rendered necessary by the fact that the defendant's infringing scale contained the mechanism of the pendulum. It would not weigh at all unless it were accurately level. None of the above testimony is admissible because the infringed indicator drum was necessary to make the defendant's scale a complete, automatic weighing scale because the rest of the scale was built to fit the indicator drum because the scale of defendant would not operate as a scale without the indicator drum, in it and because in a legal sense the whole profit of defendant's scale was due to the presence of the indicator drum, and because it is settled by the Circuit Court of Appeals in this action that the whole of the defendant's scale is an infringment upon the plaintiff's scale as patented. Finally, the indicator drum was patented by the plaintiff in combination with any weighing mechanism, and the whole of the defendant's scale with all the features mentioned above was an infringement of the plaintiff's patented scale as the Circuit Court of Appeals has held in this action. Therefore the plaintiff moves to strike out all of the evidence mentioned above because the said evidence is wholly immaterial as to any issue before the Master. The plaintiff also moves to strike out all testimony as to the particular arrangement of the mechanism of defendant's scale by means of a stirrup or cone pivots for the reasons above stated as to the particular features mentioned by the witness Theobald.

908 The plaintiff also moves to strike out the testimony of the witness Theobald as to any particular amount of selling price added to any of the defendant's scales on account of any particular device for the reasons above stated as to those particular features.

(Here followed extended argument.)

The Master: This testimony is not offered for the purpose of proving the truth of the statements found in these circulars. It is only offered, as I understand it, to show the method of advertising and the extent of advertising which they claim on their theory assisted in making these sales and therefore they should be entitled to some portion of the profits, that is, that portion which this advertising, whatever it may turn out to be, produced. Now, I don't see that it makes any difference in advertising whether they attack some other scale that's not here involved at all or whether they praise the

merits of their own scale. The question is whether that kind of advertising aided in making sales of these machines, and then if so, whether or not the profit that that advertising produced should be deducted from the profits that were made in the sales of the business. That's their theory and that's what I understand this testimony is offered to prove. It is not to prove that your machine or the patented machine is not good or that some other is better or anything of that kind. While they may deal with those very subjects, the question is what effect has that kind of advertising had on the amount of sales that were made by the Toledo Scale Company of scales involving the patented invention. That's the point.

I have had serious doubts as to the admissibility of this testimony all along and I was inclined at Toledo to rule out all of this character of testimony. We must, however, keep in mind that the defendant is trying its case on the theory that it is entitled to all profits except those directly attributable to the patented invention, and the Master should not exclude testimony offered on that theory unless he is thoroughly convinced that it is incompetent and that it will not become material by any testimony that may be hereafter offered.

I have already expressed myself as to my view of this testimony, but I don't feel that absolute confidence in it that warrants me in excluding it and I have made up my mind to receive the testimony subject to the objection. The motion will be denied and the
909 testimony accepted subject to the objections that were made when the testimony was offered in evidence and subject to the motion to exclude.

Mr. Zane: I understand that this testimony is admitted solely upon the grounds that the Master states and that it is not admitted on any such ground as attacking the other scale.

The Master: Oh no, I would not admit it if offered merely as an attack on another scale. I am admitting it on the theory that was a certain method of advertising that was pursued by the Toledo Scale Company and that they now contend that that method of advertising contributed in part to the profits that might have been made on these scales and that on their theory they would have a right to reduce the profits to the extent that those profits were made by means of advertising.

Mr. Zane: And does the Master understand it is offered solely on that theory and no other?

The Master: Well, I don't know what theory they offered it on. That is the theory upon which I admit it and on no other. I have not admitted this testimony for the purpose of proving any facts stated therein because I think it is quite clear that it would be hearsay for any purpose of that kind.

Mr. Zane: Let me ask a question of Mr. Meads.

Do you contend that that testimony is admissible on any other ground than what the Master has stated?

Mr. Meads: I think the Master has correctly interpreted the theory on which the defendant offers the testimony in question.

ORWELL C. REEVES, a witness on behalf of defendant, testified as follows:

Direct examination.

By Mr. Hibben:

"I am the same Mr. Reeves who testified before in this case.

"I have been factory superintendent of the Toledo Scale Company for approximately ten years. I first came with the Company in 1905 and was master mechanic until probably the latter part
910 of 1906, when I became factory superintendent.

"Q. As such factory superintendent were you familiar with the construction and mode of operation of the scales known in this case as cylinder scales manufactured by the Toledo Company?

"A. I was.

"Q. It appears that these cylinder scales were known by certain style numbers and that there were quite a number of style numbers. Were these scales represented by particular types, that is, were there different types of construction represented by a large number of style numbers?

"A. Yes.

"Q. About how many different types of these cylinder scales were there?

"A. About nine.

"Q. Please state briefly the general construction of these nine different types of cylinder scales.

"A. They were all of the same general construction. The cylinder scale comprised the housing over which was mounted a chart in a casing, all of which was supported on a scale base and which carried supports on which rested a scale beam or lever, and an inverted pivot mounted inwardly on this lever carried a platform. The outer end of the lever was weighted and the inner end extended into the housing and was forked, one time connected with the pendulum mechanism and the other connected with the rack which engaged with a pinion on the chart shaft which served to rotate the chart. The pendulum mechanism was comprised of a weighted stem mounted in a hub or pendulum body, attached to a pendulum body, which carried a pivot extending on each side of the pendulum body. This pivot rested in bearings supported by the chart housing. The cam was attached to the pendulum body and was so designed to rotate around the body. This pendulum mechanism was connected to the lever by means of a flexible connection. The base of the scale carried also a dash-pot, the upper end being enlarged, and this cap covering same had a projecting tube downward into the pot and surrounding a plunger. This plunger was attached at one end to the scale beam and the other operated in the dash-pot. This served to dampen the vibratory movement of the scale parts. The chart was mounted in the casing supported by the pendulum housing equipped with disc bearings on which the chart shaft was
911 mounted. The purpose of these bearings was to reduce friction.

"Mr. Zane: That's a general description of all the scales.
"Mr. Hibben: I am coming to that.
"Mr. Zane: He has not answered the question.

"Mr. Hibben:

"Q. Were all the features which you have just described embodied in all the cylinder scales made by the Toledo Company, the defendant, during the accounting period?
"A. They were all embodied, but there were further improvements added to scales later put on the market.
"Q. Now, will you please state what the different types, these nine different types of cylinder scales, were, giving the general characteristics briefly so that one may be distinguished from the other as to type.

"The Master: Did each type carry a separate number?
"A. Not always, no. The first type was of the 300, that's the original type. The next improved scale was 344, but was the same general type. You want just the types?

"Mr. Hibben:

"Q. I want first as to the types. I will come later on to bring in all the style numbers.
"A. The next type was a 345.

"Mr. Zane: This is the second type now?
"A. Second type, 345. The next was the 81 type.
"Mr. Zane: That would be third. Call out the numbers.
"A. All right. 345 was a different design from the 300. When we had 346 it was exactly the same as 345 excepting it had a different chart, but when we changed to an 81 scale, why it was the same general construction, but the color and design of the housing and many things were designed a little differently.

"Mr. Zane: We submit he is not answering the question at all. He is asked to describe the nine types and give the characteristics that enable you to tell the one from the other. That's the question.
"The Master: We have broken in here more or less. Now, I suggest Mr. Hibben, you go ahead, and we won't bother you and you put it in as you think it should be.

(Last answer read.)

"A. (continued). The next was the 181. The next was the 381, 383.
"Mr. Zane: Is that next, do you mean?
"A. 383, 581. I have that wrong. 300, 345, 81, 181, 183, 381, 383, 581 and 583.

912 "Mr. Hibben:

"Q. Now, state briefly what were the differences in general characteristics as to those different types.

"A. Change in design, change in color and finish. Some were electric and some non-electric.

"Q. Do the types which you have referred to represent series of styles?

"A. Series of styles.

"Q. Now, will you please describe briefly the general construction of the type of scale known as No. 300?

"A. The description I just gave for the cylinder scale generally covers that 300 type.

"Q. Do you recall what the particular design of the casing or the scale in general was?

"A. The casing of the housing or casing of the chart?

"Q. All of them.

"A. I don't believe I understand what kind of a description is wanted.

"Q. Give some idea on the record what the general shape or ornamentation was.

"A. The scale consisted of a base, on the outer end were supports carrying a lever mounted above the base inwardly on upturned pivots, supported from this lever was a commodity platform. The inner edge of the base was a column carrying a pendulum mechanism and mounted directly above the pendulum mechanism and supported by the housing was the rotatable chart, a chart having price computations and weight graduations exhibited to the merchant, and the customer had the weight indications exhibited on the back.

"Q. What was the construction of the dash-pot on this type of machine?

"A. The dash-pot was mounted in the base and consisted of a cylinder having an enlarged top cover with a cap having a projected tubing inward into the pot surrounding the plunger rod which was fastened to the scale beam, the lower end in the pot containing the plunger, the plunger rod being provided with suitable adjustments so that the vibratory movement of the scale could be controlled.

"Q. I call your attention to Defendant's Exhibits 38 and 39, being patents Nos. 667,652 and 830,976, and will ask you to state if you find illustrated therein the construction of dash-pot which you have referred to.

"Mr. Zane: We object as irrelevant and immaterial.

913 "The Master: Objection overruled.

"Mr. Hibben:

"Q. Go ahead.

"A. Shall I mark them?

"Q. No.

"A. The dash-pot I referred to is exhibit at Figure 3, Patent 667,652, No. 3 on patent 830,976, both by De Vilbiss.

"Q. Referring to this 300 type of machine, was there any adjustment as to the cam of the pendulum mechanism, and if so, what was that construction.

"A. The pendulum mechanism consisted of a laterally enlarged hub longitudinally bored in which was fitted an arbor, a sector was cut in this arbor in which was fitted a pendulum pivot, the pendulum pivot having means for retaining it in position. The cam had cheeks extending on either side of the pendulum hub and by means of screws in the pendulum hub which contracted the cam the cam could be made to rotate around the arbor.

"Q. I was referring to the 300 type of scale. Did you so understand?

"A. The 300 had the same features.

"Q. In this 300 type of scale was there any auxiliary or tare beam?

"A. The scale could be provided with a tare beam.

"Q. How was it arranged?

"A. It was arranged on the side of the main lever, main scale beam and moved with the movement of the lever.

"Q. Was the tare beam carried by the scale beam?

"A. The tare beam was carried by the scale beam.

"Q. Were any scales of this 300 type manufactured with the tare beam carried by the scale beam?

"A. Yes.

"Q. What were the style numbers of the scales included in the 300 type?

"A. 300, the type of scale was known as the 344. That was all of that series.

"Q. How did the No. 344 differ from the 300?

"A. In minor points of construction. The chart casing was fastened in an improved manner to the pendulum housing. There was some improvement in the lower bearing. The finish was improved and the general workmanship of the scale was improved. This scale also could be equipped with a tare beam.

"Q. Were there any changes made as to the adjustment of the flexible metal link in the rack bar?

914 "A. The scale was provided with a means for assisting to eliminate shock to the rack and pinion.

"Q. Have you any photograph or illustration which would illustrate this 300 type of cylinder scale?

"A. I prepared such a study, yes.

"Q. Will you produce it?

"A. This is the one.

"Q. You have produced a chart on bristol-board. Who prepared that chart?

"A. I did.

"Q. Including the typewritten matter thereon?

"A. Yes.

"Q. And does that photographic illustration correctly illustrate the 300 type of scale?

"A. It does.

"Q. And does the typewritten matter thereon correctly describe the features of that scale?

"A. It does.

"Mr. Hibben: I offer that chart in evidence and ask that it be marked Defendant's Exhibit 50.

"Mr. Zane: We object to the typewritten matter. That is not a proper part of the representation. The witness has already testified on these points, and when he is asked to state if that correctly states the thing he is simply testifying to a bald conclusion.

"The Master: I will sustain the objection.

"Mr. Hibben: If the Master please, perhaps that ruling may be right, but I thought it would facilitate the examination if we had the typewritten matter there. I have a number of charts here that are prepared in a similar manner. It is true I have asked the witness for a description of the machine, but it is going to take a considerable length of time to go through, and I thought it would facilitate matters and things about which there can be no dispute. Of course, the machines could be introduced in evidence, but that's not a very practicable way in an accounting case.

"The Master: That might facilitate. I can see that, if counsel was satisfied to have the testimony go in this way, but this is equivalent to asking the witness to print and hand in for use a description or a statement of any kind. I think counsel has a right to have the questions put to the witness and the answers taken if he sees fit. In other words, I don't think you can offer a printed statement in evidence.

915 "Mr. Hibben: But it will be received as to the cut or photographic parts?

"The Master: Yes, there is no objection to that.

"Mr. Zane: We want that part cut off, we don't want it in at all.

"Mr. Hibben: I understand the photographic part is accepted.

"The Master: Yes.

(Said illustration of type 300, so offered, received in evidence and marked Defendant's Exhibit 50.

Said typewritten explanation of said illustration, so offered, was not received in evidence.)

"Mr. Zane: I understand the objection is sustained to all below the words "No. 300".

"The Master: Yes.

"Mr. Zane: And we ask that they be excluded literally and cut off from the picture.

"The Master: Yes, that may be done. That the reporter will do if it is not done before. However, that written part will have to be returned with the transcript so long as it is offered.

"Mr. Hibben:

"Q. Now, referring to type No. 345, will you please state what the construction and general characteristics of that scale were and are?

"A. 345 was the same general principle as the 300 type, materially improved. It had a new design housing with means of supporting the casing, had glass openings over the pendulum exposing it to the view of the customer and merchant, and minor points of improvement.

"Q. What do you mean, that it was of the same principle?

"A. The pendulum principle, had the lever mounted on supports on the base and the platform mounted as described in the 300 scale, had the pendulum housing which was practically dust proof which supported the casing in which the chart rotated.

"Q. What provision, if any, was made in any of these 345 scales, that is, that type of scales with regard to the holding of the bearings of the chart for shipment?

"Mr. Zane: We object to that. That's nothing to do with the scale, something to hold it when it is shipped, a kind of a box.

"The Master: What's the materiality of it?

"Mr. Hibben: Why, as the witness knows and can explain, they made a provision for holding these bearings for shipment.
916 They held them away from their bearings and obviously contributed to profit because the customer got his scale in proper, workable condition and not in any damaged condition, and for that reason these scales were not returned to the factory for repair or replacement.

"The Master: I will sustain the objection.

"Mr. Hibben:

"Q. What were the style numbers comprised in this 345 type of scale?

"A. 345, 346, 347, 348, 349, 350.

"Q. Any others?

"A. No, I don't recall any others now.

"Q. How about the 351, 352 and 353?

"A. Yes, they would go in, they are tare charts.

"Q. But otherwise were they of the 345 type?

"A. They are the same type with different charts.

"Q. How did the 346 differ from the 345?

"A. 346 had a 24-pound chart, 345 had a 20-pound chart. Otherwise the scale was identical.

"Q. What was the difference between the 347 and the 345?

"A. The 347 had a 20-pound chart, the same capacity as 345, but it had a different price range, the chart had a different price range.

"Q. How did the 348 differ from the 345?

"A. 348 was the same type, being equipped with a 15-pound chart.

"Q. How did the 349 differ from the 345?

"A. 349 was equipped with a tare chart instead of a computing chart. It was a computing tare chart instead of money values.

"Q. But was it otherwise the same?

"A. Otherwise the same.

"Q. How did the 350 differ from the 345?

"A. That was a tare chart, otherwise the scale was identical.

"Q. How did the 351 differ from the 345?

"A. That was a tare chart, otherwise the scale was identical.

"Q. How did the 352 differ from the 345?

"A. That was a tare chart, otherwise it was identical.

"Q. And how did the 353 differ from the 345?
"A. That was a tare chart, otherwise the scale was identical?
"Q. 353?
917 "A. 353 was a 30-pound computing chart as I recall it, 30-pound computing chart.
"Q. And didn't have the tare chart?
"A. And there was no tare chart.
"Q. Have you prepared and can you produce any chart illustrating this 345 type of scale together with any description thereof?
"A. Can we produce a chart?
"Q. (Question read.)
"A. Yes, I have one.
"Q. Who prepared that chart, both as to the photographic illustration and the typewritten matter thereon?
"A. I prepared this.

"Mr. Hibben: I offer that chart in evidence and ask that it be marked Defendant's Exhibit 51.
"Mr. Zane: We object to the typewriting matter.
"The Master: Objection sustained.

(Said illustration of type 345, so offered, received in evidence and marked Defendant's Exhibit 51
Said typewritten explanation of said illustration so offered, was not received in evidence.)

"Mr. Hibben:

"Q. What was the construction of the No. 81 type of cylinder scale?
"A. The 81 type of cylinder scale was a different finish, was of the same general mechanical construction.
"Q. As what?
"A. As the 345. It had a different design housing, the means for carrying the chart casing were slightly different from the 345, the pendulum was not exposed to view, otherwise the construction was the same.
"Q. What style numbers other than No. 81 was comprised in this No. 81 type of scale?
"A. No. 81——

"Mr. Zane: We object and move to strike out his answer.
"The Master: The question or his answer?
"Mr. Zane: His answer. His answer is not responsive.

(Question and answer read.)

"Mr. Zane: What others than 81 and he begins with 81.
"The Master: Had you completed your answer?

"A. No. 82, 83, 84, 85 and 86.

"The Master: Well, motion denied.

"Mr. Hibben:

"Q. Was there a No. 87 and a No. 88?
"A. Yes, there was 87 and 88.
"Q How did the 82 differ from the 81?
918 "A. 82 was a 24-pound chart.
"Q. What was the chart capacity of the 81?
"A. The 81 had a 20-pound chart.
"Q. Was 82 otherwise the same as 81?
"A. Identical.
"Q. What was the difference between 83 and 81?
"A. 83 had a 20-pound chart with a different price range, otherwise it was identical.
"Q. How did No. 84 differ from No. 81?
"A. 84 was a 15-pound chart, otherwise identical.
"Q. Was there any change in these style numbers any time during the accounting period? I refer to Nos. 81, 82, 83 and 84?
"A. No.
"Q. At any time was the practice of changing the style numbers or going according to certain style numbers with reference to chart capacity discontinued?
"A. Yes.
"Q What became the practice?
"A. It became the practice on a scale having a certain design and certain characteristics to give it a style number and the charts to fit that scale were given letters.
"Q. After such practice was inaugurated were the style numbers 82, 83 and 84 discontinued?
"A. They were eventually abandoned, those style numbers. No those style numbers were not continued.
"Q. Then how was the scale designated by style number?
"A. It would be the 81 style number.
"Q. And what would be the distinguishing mark to indicate the chart capacity?
"A. Why, the letter appearing on the chart.
"Q. What letter?
"A. The letter for that particular chart.
"Q. For instance, what?
"A. Well, a 20-pound chart might be the letter "A", a 24-pound chart would be "B", and so forth.
"Q. In the 81 series or type were there any electrically lighted scales?
"A. Yes, there was.
"Q. What were their style numbers?
"A. I am in doubt about that. I would not say. I have forgotten that.
919 "Q. Will you look that up and be in a position to state later on?
"A. Yes, I can. I think very probably some of those scales were electric illuminated.
"Q. Do you recall what the construction of the electrical devices or means of illumination was?

"A. Consisted of?
"Q. Yes.
"A. The scale was provided with a switch.

"Mr. Zane: You mean some other scale. He says he does not know whether they work or not. I am objecting to his testifying as to this scale because he says he does not know.
"The Master: Of course, if he does not know whether it was attached, he does not know how it was attached.
"The Witness: I know how it would be attached because an electric device could have been put on that scale.

"Mr. Hibben:

"Q. Have you prepared and can you produce the illustration and general description of this No. 81 type of cylinder scale?
"A. I prepared such a chart, yes.
"Q. Did you yourself prepare that chart which you have just produced?
"A. Yes.
"Q. Both as to the illustrative matter and the descriptive matter?
"A. I did.

"Mr. Hibben: I offer that chart in evidence and ask that it be marked Defendant's Exhibit 52.
"Mr. Zane: Same objection to the typewriting.
"The Master: Objection sustained.

(Said illustration of type No. 81, so offered, received in evidence and marked Defendant's Exhibit 52.
Said typewritten explanation of said illustration, so offered, was not received in evidence.)

"Mr. Hibben:

"Q. Now, referring to the No. 181 series or style, what was the general construction of this type?
"A. The general construction of the 181 scale is the general construction of the 81 series with the improvements in finish, the scrolls being nickeled, the pendulum mechanism was exposed to the view of the customer and minor improvements in detail construction of the scale.
"Q. You say the pendulum mechanism was exposed to the customer. Was this mechanism open or enclosed?
920 "A. The pendulum mechanism was enclosed in the housing and was exposed to the customer through glass openings.
"Q. In this 181 type was an auxiliary or tare beam employed?
"A. The auxiliary or tare beam could be put on any of these types of scales, attached to the lever.
"Q. Was that tare beam carried by the scale beam?
"A. It was carried by the scale beam.
"Q. What were the style numbers comprised in this No. 181 type or series of scales?

"A. 182, 183, 184, 185, 186, 187 and 188.

"Q. No. 181 was a scale and was sold under that style numbers, was it?

"A. Yes.

"Q. How did the No. 182 differ from the 181?

"A. It had a 24-pound chart instead of a 20-pound chart.

"Q. How did the 183 differ from the 181?

"A. It had a 20-pound chart with a different price range.

"Q. How did the 184 differ from the 181?

"A. It had a 15-pound chart.

"Q. And were these different scales about which I have just asked you otherwise the same?

"A. They were identical.

"Q. How did the 185 differ from the 181?

"A. It contained a tare chart, otherwise was identical.

"Q. How did the 186 differ from the 181?

"A. It contained a tare chart, other- the scale was identical.

"Q. You mean a tare chart of larger capacity than 185?

"A. It had a larger capacity and different tare ranges, otherwise the scale was identical.

"Q. How did the 187 differ from the 181 and the 185?

"A. In the tare ranges only, it had the same capacity chart, otherwise the scale was identical.

"Q. Were these style numbers, 182 to 187, changed at any time?

"A. No.

"Q. Was the practice changed as to designation by style numbers when different charts were used?

"A. I don't think that series was affected any. I don't think we made any change in numbering our scales while that series existed.

921 "Q. Do you know of any records which you have that would show what the fact would be?

"A. We would have records.

"Q. Will you examine those records and ascertain definitely?

"A. I will.

"Q. In this 181 series or type of cylinder scales were there comprised any electric lighted scales?

"A. Yes.

"Q. What were the style numbers of the electric lighted scales of this series?

"A. I can't give you that information offhand.

"Q. Have you any records which would refresh your recollection on that point?

"A. We have.

"Q. Do you know what the construction was of any of these electric lighted scales of the 181 series, I mean as to the electrical features.

"A. The electric feature consisted of—the feature of the scale was that by putting a commodity on the platform it would automatically illuminate the cylinder chart and facilitate the reading. This was done by the lever coming in contact with an electric switch and

closing the circuit and permitting the lights to light. The device added no friction to the scale and when the commodity was removed the switch was released and went back to its normal position, the lights going out.

"Q. Was there any change made in the regular construction of the scale or its frame to accommodate the lamps?

"A. A very minor change.

"Q. What changes were made?

"A. Slight additions to the scale which was necessary to equip them with a switch rack, a frame for carrying the electric lights, wiring the scale properly and a ventilating device and facilities for connecting the electric attachment with the city current or with the outside current.

"Q. Where were these electric lamps located and how were they enclosed?

"A. They were located above the reading line on the chart, both on the customer's and merchant's side. They were enclosed on a cast iron frame covering, the opening covered with glass on which appeared illuminated signs on the customer's side reading "Toledo No springs Honest weight" which would flash into view
922 when the commodity was placed on the platform, and on the merchant's side the light would illuminate the chart to facilitate reading.

"Q. Where was that housing located that had this transparent sign "Toledo," and so forth?

"A. The electric lights and the illuminated signs were on the front and back of the housing covering the chart, one exhibited to the merchant and one to the customer.

"This casing was mounted on the housing.

"Q. What part of the housing?

"A. Immediately above the pendulum mechanism.

"Q. With relation to the chart where was that housing placed?

"A. The chart was mounted in the casing immediately above the pendulum mechanism, fastened securely to the pendulum housing.

"Q. I am talking about the housing for the electric lamp that carried the Toledo sign.

"A. It was fastened to the pendulum housing immediately above the pendulum supports.

"Q. But with relation to the chart house or casing where was that electric lamp housing located, was it below, on the side or on the top?

"A. It was on the top in line with the reading line. I thought I made that very clear.

"Q. Have you prepared and can you produce any photograph or illustration of the 181 type or series of scales together with any descriptive matter?

"A. I prepared such a study.

"Q. Did you yourself prepare the photographic illustration and also the descriptive matter appearing on this chart which you have produced?

"A. Yes, I did.

"Mr. Hibben: I offer in evidence the chart produced by the witness of this 181 scale and ask that it be marked Defendant's Exhibit 53.

"Mr. Zane: We object to the typewriting.

"The Master: Objection sustained.

(Said illustration of type No. 181, so offered, received in evidence and marked Defendant's Exhibit 53.

Said typewritten explanation of said illustration so offered, was not received in evidence.)

"Mr. Hibben:

"Q. Now, referring to the No. 381 type or series of cylinder scales, what was the construction of scales of that type?

923 "A. It was of the improved construction of the 345 type of scale, the pendulum mechanism and chart were exposed to view to both the merchant and customer, the chart housing was provided with plate glass ends through which could be seen the disc bearing mounted on the casing on which the chart rotated. The scale had a new design housing having a central support supporting the chart housing mechanism from the center of the pendulum housing, and on the outside end there were two pillars. The pendulum mechanism consisted of laterally projecting hubs transversely bored, having an arbor for the cut-out sector in which was mounted the pendulum pivot retained in position by suitable locking means. The pendulum cam was provided with cheeks to fit over the arbor, and by means of adjusting screws on the pendulum body the cam could be made to rotate. The scale beam was provided with shock absorbing means to prevent damage to the rack and pinion so when the commodity was placed on the scale it would save any damage to the accurate parts of the chart mechanism, or the rack and pinion rather. The scale was provided with chart lift levers to prevent damage in transportation and the lever was provided with shipping pins which fitted through the standards,——

"Mr. Zane: We object to this—shipping pins. This is the means of shipping. We move to strike that out.

"The Master: Of course that's not material, but it seems to come in as a part of the general description in this answer. Had you completed your answer?

"A. No, I had not finished.

"The Master: Go ahead.

"A. — through the standards, passing through holes in the standards with corresponding holes in the level with a similar device that fastened on the housing which served to lift the lever out of its bearings in transportation. The end of the scale beams connecting onto the pendulum mechanism by means of a cone pivot point in

a seat on a stirrup fastened on the flexible link, the stirrup having provision to prevent same from coming off or changing character in operation.

"Q. What was the reason of this provision of the means for preventing the movement or jumping of the pivot?

"A. What was the reason?

"Q. Yes.

"A. It was found that in placing a commodity on the scale it frequently happened that the cone pivot point would come
924 out of engagement with the seat in the ribbon stirrup, and consequently the scale would be inoperative.

"Q. Was this stirrup construction which you have just described embodied in all of the cylinder scales of this 381 series?

"A. Yes.

"Q. I call you- attention to the printed Patent Office copy of Hapgood Patent No. 1,166,128, dated December 28, 1915, and issued to the Toledo Scale Company of Toledo, Ohio, and will ask you to state whether you find illustrated therein in detail the stirrup mechanism which you have just described.

"Mr. Zane: We object to this. It is indirectly getting the contents of this paper in evidence and the paper speaks for itself. He asked him the general conclusion does this paper contain the stirrup mechanism that he has described. The paper will speak for itself.

"The Master: Has this witness qualified as an expert?

"Mr. Hibben: Not as a patent expert.

"The Master: Mechanical expert?

"Mr. Hibben: He has qualified as a mechanical expert.

"The Master: Objection overruled.

"Mr. Hibben:

"Q. Go ahead.

"A. It is shown in Figure 12.

"Mr. Hibben: I will want to put this in evidence, but I want to keep the consecutive order of my charts and I will reserve introducing it until I get through with my charts.

"Q. I call your attention to a printed Patent Office copy of De Vilbiss patent No. 1,122,222, dated December 22, 1914, and issued to the Toledo Scale Company of Newark, New Jersey, and will ask you to state whether this patent illustrates the shipping pins which you say were embodied in the scales of the 381 type?

"A. Figure 3 shows the shipping pin connected at the housing end and Figure 4 shows the shipping pin passing through the standard and supporting the lever.

"Mr. Zane: We want the same objection to this.

"The Master: Objection overruled.

"Mr. Hibben:

"Q. Do the figures which you have pointed out illustrate the shipping pins and the construction of scale for accommodating those pins which you saw were embodied in the scales of the 381 type?

"Mr. Zane: We object as calling for a conclusion.
"The Master: Objection overruled.

925 "A. Yes.

"Mr. Hibben:

"Q. What other style numbers of cylinder scales were comprised in type or series No. 381?
"A. 382, 383, 384, 385, 386, 387, 388.
"Q. In enumerating the different types of these cylinder scales did you not refer to the 381 as a separate type, that is, separate from the 383?

"Mr. Zane: We object to that as leading and asking his opinion as his own testimony.
"The Master: Objection overruled.

"A. I referred to them separately. 381 is one type and 383 is another type, one being electric and the other non-electric.

"Mr. Hibben:

"Q. Now, according to your classifications what are the style numbers comprised in the 381 series?
"A. 381 would comprise the 381 and the 382.
"Q. What was the difference between the 382 and the 381?
"A. 382 simply having a higher saddle, 4-inch saddle instead of a 2-inch saddle.
"Q. Was it otherwise the same?
"A. Otherwise the same identically.
"Q. Were there style numbers 385, 386 and 395?
"A. There were style numbers 385, 386, yes.
"Q. And how about 395?
"A. They were of the same type having a smaller chart.
"Q. Were the 385, 386 and 395 styles of the same 381 type?
"A. The 381 type.
"Q. How did the 385 differ from the 381?
"A. 385 differed from the 381 inasmuch as it had a 10-pound cylinder instead of a 20-pond. It had a small cylinder instead of a large cylinder.
"Q. But was it otherwise the same as the 381?
"A. Otherwise the same.
"Q. And how did the 386 differ from the 381?
"A. 386 had a 4-inch saddle and had a small drum instead of a large drum.
"Q. Was it otherwise the same as the 381?

"A. Otherwise it was the same as the 381.
"Q. How did the 395 differ from the 381?
"A. I don't recall that.
"Q. Have you any record or memorandum that will identify that?
926 "A. I have.
"Q. Will you look that up during the noon recess?
"A. Yes.
"Q. Have you now ascertained how the style No. 395 differed from the 381? If so, what is it?
"A. I find the 395 scale was the same as the 385 scale, the number being changed when they made a change in the saddle. The scale was formerly built 385 non-electric and 387 electric. By putting this changed saddle in it took the place of scales previously on the price list.

"Mr. Zane: Move to strike out his answer as not responsive, it all having been directed to 385, and he is asked about 395.
"Mr. Hibben: The record shows that the 385 was the same as the 381 and he has compared it.
"Mr. Zane: He has not yet told us the difference between 395 and 381?
"A. The 395 is the same scale as a 381 except that it has a small chart and a different saddle supporting the chart casing.

"Mr. Hibben:

"Q. In referring to this No. 381 series you have spoken of a yielding connection between the scale beam and the rack lock. What was the character of that connection?
"A. The character of that connection was a leaf spring mounted on what we term a rack foot pivot in the forked arm of the lever and the end of this leaf spring supported the rack rod and the end of the rod was a rack which engaged with a pinion on the chart shaft, the purpose being when a commodity was placed on the platform scale it prevented the shock of the load being carried directly to the chart shaft pinion and rack and served as a great protection from injury of these parts.
"Q. Have you prepared and can you produce any illustration of this No. 381 series or type together with any description thereof?
"A. I have.
"Q. Did you yourself prepare this photographic illustration and the descriptive matter thereon?
"A. I did.

"Mr. Hibben: I offer in evidence the chart of this No. 381
927 type of cylinder scale and ask it be marked Defendant's Exhibit 54.
"Mr. Zane: Same objection to the typewriting.
"The Master: Objection sustained.

(Said illustration of type No. 381, so offered, received in evidence and marked Defendant's Exhibit 54.

Said typewritten explanation of said illustration, so offered, was not received in evidence.)

"Mr. Hibben:

"Q. You were to ascertain whether in the number 81 series there were any electric scales, that is, electric lighted scales. What have you found in that regard?

"A. Yes, I have found it.

"Q. What was the electric equipment and what were the style numbers?

"A. I found that in July, 1910, the serial numbers beginning with 81 and ending at 86 changed and the scales took the numbers 83, 84, 87 and 88, scales 83 and 84 being regular types of this series and containing a large chart, 87 and 88 being a similar construction with a small chart, 84 being the number of the scale for the large chart and 88 being the number of the electric scale of the small chart.

"Q. After this change was made what was included under the designation or style No. 81?

"A. 81 was of the former series. 83 was the scale that took its place.

"Q. You mean that No. 81 was discontinued?

"A. Not necessarily so. That existed on a certain price list as 81 and when the price list was revised in 1910 that serial number was changed to 83, and it was the same scale. In the first series the scales were known as 81, 82 and 83, getting these numbers from the difference in the chart. In the later series the scales bore the No. 83 and got its chart designation by having letters assigned.

"Q. In this type or series what were the electric and non-electric scales as to style number?

"A. 83 was the non-electric scale with the large chart. 87 was the non-electric scale, small chart.

"Q. How did the No. 88 differ from the No. 86?

"A. No. 88 was an electric illuminated scale. No. 86 was a non-electric scale.

"Q. But otherwise was No. 87 the same as No. 86?

"A. Outside of the chart arrangement it was identical in the mechanism construction—no, on the electric feature. Out-
928 side of the electric feature and the chart construction the mechanical construction was the same.

"Q. With regard to the type or series No. 181 you were to ascertain whether the style numbers were changed at any time. Was there any change, and if so, what was it?

"A. I found that in 1910 they were changed, scale No. 183 represented non-electric type with large charts, No. 187 represented the small sized chart, No. 184 represented the large sized chart electrified, electric illuminated. No. 188 represented the small size chart electric illuminated.

"Q. What became of the style Nos. 181 to 184 prior to such change in number?

"A. On the re-issue of the new price list those numbers were united excepting 183 and 184 which represented this type, new series.

"Q. Was this new series No. 183 an electrically illuminated scale?

"A. 183 was a non-electric scale.

"Q. What was the general construction and characteristics of the 383 type or series?

"A. The 383 was of the general construction of the 381, having the center supported housing and all the latest improvements, including the electric illumination. This electric illumination consisted of lights being placed in a metal box, glass covered, attached to the housing through which the chart could be exhibited. The electric lights were on the outside of the casing and above the reading line on the chart. The device was so arranged that by placing a commodity on the platform of the scale contact was made through an electric switch, permitting the lights to light and illuminate the chart, in addition signs to the merchant and signs to the customer calling his attention to the honest weight and no springs feature of the scale.

"Q. In this 383 type was there any tare beam carried by the scale beam?

"A. Yes.

"Q. What were the style numbers comprised in this 383 type or series?

"A. 383 was a series in itself. It included the cylinder type scales in which large sized charts could be placed and electric illuminated.

"Q. What were the 384, 387, 388 and 397?

929 "A. The 384 was the same scale with a 4-inch saddle raising the chart slightly higher than ordinary.

"Q. It was the same as what scale with the exception noted?

"A. It is the same as the 383.

"Q. What was the 387?

"A. The 387 was the same scale with a small sized chart having the regular 2-inch saddle. The 388 was the same scale with a small sized chart having a 4-inch saddle, the purpose being to regulate the height of the reading line to suit customers. The purpose of the different heights of saddles was to regulate the reading line to suit the height of the customers.

"Q. What was the 397?

"A. The 397 was the same as the 387 excepting the saddle construction was changed.

"Q. How did the 397 compare with the 383?

"A. It was exactly the same scale excepting the 383 has a large diameter chart and the 397 having the small diameter chart, both being electric illuminated.

"Mr. Zane: Now, we move to strike out the testimony as to 395 and 397 because there are no such scales in the accounting.

"The Master: Now, is this right, gentlemen, are not these scales involved, these numbers?

"Mr. Hibben: I don't know by style numbers, but I am just taking the series and telling just what style numbers are involved in the

series. It may be. I have not checked it up and I could not say offhand.

"The Master: Of course, if they are not in the accounting, why there is no need.

"Mr. Hibben: But I have not checked it up. I really could not say.

"Mr. Meads: I have not that portion of the testimony here, your Honor, and I could not tell.

"The Master: It would take some time to look it up. I will sustain the motion. If you find later along that these scales are involved, then I will make a different ruling.

"Mr. Hibben:

"Q. How was a No. 383 scale with a large capacity chart designated?

"A. The charts were designated by letters, A representing one style chart, B representing another type, C representing another type. This type scale could be equipped with any chart.

930 "Q. A fan scale designated as 383BA would represent what?

"A. That would represent some similar chart in that type of a scale.

"Q. What would the "B" and what would the "A" represent?

"A. I could not say except they refer to the capacity of the chart and the price range of it. If they would have another chart of the same diameter and would have different letters, they would refer to their changed price list or capacity.

"Q. Can you produce a cylinder scale made by the Toledo Company which would serve to exemplify the construction of the 383 type of cylinder scale made by that company during the accounting period?

"A. We have such a scale here. It is exactly the same with the exception that the scrolls over the electric signs was illuminated in one instance and in the present instance they are plain. The sign glasses in one instance were stencilled and in the present instance they are etched. Otherwise the scale is identical.

"Q. Do you refer to the gold finished scale on the table before you?

"A. Yes.

"Q. What is the type or series marked on that scale?

"A. This is a 383 with a BA chart.

"Q. With the exceptions which you have stated, is this scale the same in construction and operation as the scales of the 383 series which were made and sold by the Toledo Company during the accounting period?

"A. Yes.

"Mr. Hibben: I introduce the scale produced by the witness and ask that it be marked Defendant's Exhibit 55.

"Mr. Zane: Wait a minute. When was that scale made?

"A. This particular scale?

"Mr. Zane: Yes.

"A. I could not tell you without verification.

"Mr. Zane: How long ago?

"A. I would not know.

"Mr. Zane: We object to it because it does not yet appear that's even a scale made in the accounting period.

"Mr. Meads: This is simply an illustrative model. You might make it today.

931 "The Witness: This is scale No. 180,638 built for commercial trade.

"Mr. Zane: No reason for not introducing a scale that was made during the accounting period.

"Mr. Hibben: We have none, your Honor, they are made and sold. We have not any. I have tried to get one. I have done the best I could. It is illustrative.

"The Master: Yes, I think, it is competent evidence, even though not made within the infringing period, under the testimony that it is the same scale with unimportant exceptions that the witness gave. I will overrule the objection.

"Mr. Zane: Wait just a minute. Then we object to it because it bears upon no issue that is now before the Master.

"The Master: Objection overruled.

(Said scale, so offered, received in evidence and marked Defendant's Exhibit 55.)

"Mr. Hibben:

"Q. Referring to this scale, Defendant's Exhibit No. 55, does this scale have any dash-pot?

"A. It has.

"Q. How does the dash-pot compare in general construction and mode of operation with the dash-pots as used on all cylinder scales made by the Toledo Company during the accounting period?

"A. The same.

"Q. And were all of the cylinder scales during the accounting period provided with dash-pots?

"A. They were.

"Q. Does this scale, Exhibit No. 55, have leveling feet and a spirit level?

"A. It has.

"Q. Will you please point out the places where those leveling feet are located and state the number of the leveling feet?

"A. There are two adjustable leveling feet under the housing and of the base designated by the words "leveling screw" designated on the base adjacent to the threaded and of the leveling screw projecting through the base. The scale is equipped with a double spirit level to tell when the scale is set perfectly level on the counter. I might say the spirit level is mounted on the top of the base visible to the operator.

"Q. Does this scale have one or two spirit levels?

"A. The scale has two spirit levels set at right angles.

"Q. Do all of the cylinder scales made during the accounting period have at least one spirit level?

"A. Yes.

932 "Q. And some of them have two spirit levels?

"A. Some had two and some had one.

"Q. Why did some of these scales have two spirit levels?

"A. As a more efficient means of getting the scale perfectly level.

"Q. Where one of these cylinder scales only had one spirit level how did the operator know when the scale was level throughout?

"A. They could determine that by the position of the zero line on the chart. By adjusting the leveling screws the chart would rotate backward and forward until it came absolutely in line with the line on the chart at which point the scale was level.

"Q. You say that all of the Toledo cylinder scales made during the accounting period had these leveling feet or so-called leveling screws?

"A. Yes.

"Q. And were they substantially the same as the leveling screws or feet shown on this Exhibit 55?

"A. They were.

"The Master: Some of them had three, didn't they?

"A. No. There are three, but there are only two adjustable, one remained fixed and permanent like a tripod.

"Mr. Zane: Mr. Theobald said four, three adjustable, this morning.

"The Master: Well, he said three. I don't remember he said three adjustable.

"The Witness: He may have become confused.

"Mr. Zane: I move to strike out his statement.

"The Master: Yes.

"Mr. Hibben:

"Q. This scale, Exhibit No. 55, does it show the stirrup connection which you described this morning as between the pendulum connection and the scale beam?

"A. Yes.

"Q. Can you state when this stirrup construction was first embodied in any of the cylinder scales of the Toledo Company and in what type?

"A. The middle of the year 1910, in August, 1910, in all cylinder type scales.

"Q. After that time was it incorporated in all of the cylinder scales made and sold by the Toledo Company?

"A. Yes.

"Q. You have also spoken of a spring or shock absorber

933 connection between the scale beam and the rack rod. Does this scale, Exhibit No. 55, embody that shock absorber?

"Mr. Zane: We object as all this is leading.

"The Master: Does not the scale itself show?

"Mr. Hibben: I think the record ought to show where it is.

A. The shock absorber went onto the stirrup in 1911, the stirrup adjustment, and the shock absorber in 1910, the middle of the year.

"Mr. Hibben:

"Q. What part of the year 1911 did the stirrup go on?
"A. The first of the year, in January.
"Q. And was this shock absorber connection used in all the different types of cylinder scales.
"Mr. Zane: We object as leading.
"The Master: The question is leading, Mr. Hibben, I will sustain the objection.

"Mr. Hibben:

"Q. On what scales manufactured and sold by the Toledo Company was this shock absorber device employed?
"A. On all cylinder type scales beginning January, 1911.
"Q. When was the pivot mounted which is shown in this particular Exhibit No. 55, I refer to the pivot mounting of the pendulum, first embodied in any cylinder scales made and sold by the Toledo Company?
"A. The pendulum pivot?
"Q. The mounting of the pivot, the particular means for the mounting of the pivot?
"A. The mounting of the pivot as shown in this scale has been in force since the beginning of the scale. The method of locking the cam in relation to the pivot was embodied in August, 1910.
"Q. In what cylinder scales made and sold thereafter by the Toledo Company was that particular pivot mounting shown as shown on Exhibit 55 embodied?
"A. All cylinder type scales.
"Q. Referring to the particular cam adjustment of the pendulum mechanism as used in this scale, Exhibit No. 55, when was that feature first embodied in a cylinder scale of the Toledo Company?
"A. That particular cam adjustment, locking means, has been in force since August, 1910.
"Q. In what cylinder scales made and sold by the Toledo Company has that cam adjustment feature been employed?
934 "A. On all cylinder scales.
"Q. This scale, Exhibit No. 55, has glass ends in the chart housing or casing. When was this feature of the glass ends first adopted by the Toledo Company in the cylinder scales made and sold by it?
"A. I could not give the date of that.
"Q. About when as near as you can state it?
"A. I would think about in July, 1910.
"Q. In what cylinder scales thereafter was that feature of the glass ends used in Toledo cylinder scales and what style numbers?
"A. It would be in cylinder scales 381, 382, 383, 384, 385, 386, 387, 388, 395 and 397.

"Q. Referring to scale, Exhibit No. 55, I notice that the scale beam has a transverse, horizontal hole through it near the pendulum casing and also that there are projected forwardly from this casing two pairs of lugs. What was that construction?

"A. A shipping pin was inserted in the slot formed by the lugs and passing through the hole in the lever which retained the lever in a fixed position for transportation.

"Q. Have you such shipping pins that belonged to this scale?

"A. I don't know whether I have or not.

"Mr. Zane: We object to all this as irrelevant and immaterial.

"A. Yes, these are the shipping pins."

"Mr. Zane: I move to strike out his answer.

"The Master: What is the materiality of those devices that are simply used in transporting the scale to the dealer and has nothing whatever to do with the actual working of the scale?

"Mr. Hibben: Oh, yes it goes to the question of whether it contributes to the profits or not. Now, if this scale was sent out without these pins, the bearings are apt to become broke and the pivots are apt to be broken and it has to come back to the factory and be replaced or repaired, and in that case it would be a loss to the Company to that extent and in that way it contributes to the profits because a scale gets to the customer in a damaged condition; it is a part of the construction of the scale.

"The Master: On the same principle you might show they packed their scales very carefully so there would be no destruction
935 in transit and shipping them by express.

"Mr. Hibben: No, this is a feature that is a patented feature. We have patents covering that.

"The Master: I will deny the motion.

"In the Exhibit 55 the hole through the standard or support for the scale beam and also through the scale beam is for the shipping pin that supports and lifts it off its bearing.

"I have prepared and here produce a chart bearing a photographic illustration of the 383 type scale with a typewritten description thereof.

(This chart was offered in evidence and objection was raised by the counsel for plaintiff to the typewritten matter. The photographic illustration was received in evidence and marked Defendant's Exhibit No. 56, and the typewritten explanation of the illustration was not admitted.)

"The next type, the 581 series, was somewhat similar in design to the 345. It was made however only in the blue finish and had solid casing ends so that the view into the chart was prevented, and the pendulum openings in the housing were covered only with plain glass, generally only a low priced cheap finish on the scale. The mechanism was identical with the 345 type. The 581 is a separate class non-electric, large chart. The 585 is identical with the 581

except that it has a small cylinder with a small capacity chart. The 595 is the same as the 585 except that it has a different casing.

"The No. 583 is the same as the No. 581 type but it is electrically illuminated. This series includes the No. 587 which is the same scale as the No. 583 except it has a small cylinder and capacity of the chart and is electrically illuminated, and the 597 which was the same as the 583 except for changes in the saddle connections supporting the cylinder casing. In these small cylinders the chart capacity is of ten pounds while the larger cylinder capacities vary from fifteen pounds to fifty pounds.

I have prepared and here produce a photographic reproduction of the No. 581 type series together with a typewritten description thereof. (This chart was offered in evidence and objection was made by counsel for plaintiff to the typewritten matter. Accordingly, the photographic illustration was admitted in evidence and
936 marked Defendant's Exhibit No. 57, while the typewritten explanation of said illustration was not admitted.)

"I have also prepared and here produce a chart bearing a photographic reproduction of the No. 583 type of scale, together with the typewritten description thereof. (This chart of the No. 583 type of scale, was offered in evidence and objection was raised by counsel for plaintiff to the typewritten matter. Accordingly, the photographic illustration was received in evidence and marked Defendant's Exhibit No. 58, while the typewritten explanation of such illustration was not admitted.)

"Mr. Zane: if your Honor please, I desire to withdraw the motion to strike out testimony as to 395 and 397, because there are some of such scales among the scales on hand.

"The scale, Exhibit No. 55, is provided with screws for lifting the chart out of its bearings and holding it in such position to serve as means to prevent damage to the chart bearing or the rack and pinion during shipment. The screws on the front of the chart housing are turned to contract with a lever pivoted within the housing so as to swing the lever to contact with the chart shaft when it is to be raised. I do not now recall when we began using this chart raising device but I can lock it up and ascertain it definitely. After it was adopted we used it on all cylinder scales.

Then testimony as follows:

Mr. Hibben: I offer in evidence these patents, being copies of patents Nos. 1,166,128, and 1,122,222, being the ones that I referred to this morning, and ask that they be marked respectively Defendant's Ehibits 59 and 60.

Mr. Zane: We object to these patents, both patents were issued long after the accounting period.

The Master: After the close of it?

Mr. Zane: Yes, yes, both of them, and we object to both of them on that ground. We object to Defendant's Exhibit 59 because it has no relevancy and no bearing here. We object to it, of course, for the reason that it is immaterial, irrelevant and incompetent here. I

have already stated some of the reasons why it is incompetent, and it is immaterial and irrelevant for the reason that it simply shows a further infringement of our patent, that's all it shows, and we object to the Exhibit 60 on the ground that that is incompe-
937 tent, irrelevant and immaterial and not admissible under any of the issues before the Master.

The Master: Were those patents issued after the accounting period?

Mr. Hibben: They were applied for before, but were issued after, but they were features incorporated on the chart and gave it value, and the value we expect to show. It is immaterial so far as those features are concerned whether the patents issued before or after.

The Master: Well, they were embodied in the scale?

Mr. Hibben: Yes.

The Master: Objection overruled.

Mr. Zane: Exception.

(Said copies of Patents No-. 1,166,128 and 1,122,222, so offered received in evidence and marked Defendant's Exhibits 59 and 60 respectively.)

Cross-examination.

By Mr. Zane:

"Q. When did you familiarize yourself with the type numbers of the cylinder scales made by the Toledo Company?

"A. Within the period of the last four weeks.

"Q. When you testified before you had not refreshed your memory in regard to these matters?

"A. No.

"Q. And you were not then familiar with those matters?

"A. No, I was familiar, but I was confused.

"Q. How did you familiarize yourself with those matters?

"A. I got circulars and price lists where I could and records from the assembling room.

"Q. And formed your knowledge in that way?

"A. Yes.

"Q. Now, what price lists did you use to familiarize yourself?

"A. I didn't have any late price lists, but knowing the numbers and by referring to the pictures I recalled the construction.

"Q. Well, what price lists did you have?

"A. I had 1912, 1913, 1914.

"Q. The price lists of 1912, 1913 and 1914. Did you have any older price list?

938 "A. I did not.

"Q. Well, how did those price lists familiarize you with the scales you were making back in 1906, 1907 and 1908?

"A. I knew by a description of those scales we had. They have all been made a general type and the changes were very slight in the construction of the design. They have been design largely and finish.

"Q. The scale is the same scale as it was then?
"A. Yes.
"Q. In its design and its manner of operation?
"A. The designs changed. The manner of operation was the same.
"Q. Now, when you were on the stand before you told us you didn't have access to the records. When did you obtain access to those records?
"A. I didn't have any. We have no records. They were taken from data and information I could pick up here and there. There are no permanent, fixed records.
"Q. Do you remember this question being asked you: 'Could you find out from some place what was your first cylinder scale made?' and your answer was 'I don't know whether I could or not. I don't have access to those records.' What did you mean when you said you didn't have access to those records?
"A. I meant any record pertaining to a scale that was built at a certain time, the record of a sale, for instance.
"Q. Now, when did you get access to those records?
"A. I never had access to them.
"Q. And you have never looked at them in order to familiarize yourself with those things?
"A. No, sir.
"Q. Where did you find out when a thing was first put into a scale?
"A. That particular scale, 300, I got the photograph of that and refreshed my memory by talking to people here and there.
"Q. You asked somebody about it?
"A. No, I was familiar with the scale and I was simply refreshing my memory regarding it, but there was no permanent records any place regarding the construction of that scale.
"Q. In your Exhibit 60, where did you get that picture?
939 "A. I could not say where I got that particular one.
"Q. You have not any idea where you cut it out?
"A. Cut it off from a photograph.
"Q. Well, where was the photograph?
"A. I don't know where I got that particular one, may have got it from the sales department, they supplied them to us. That particular one I don't recall just who gave it to me.
"Q. Was it taken from a catalog?
"A. No, it was taken from an actual photograph of the scale at that time.
"Q. This is not a photograph, this is a print, is it not?
"A. Well, it is a photographic print.
"Q. That's a print of something?
"A. A print from a photograph plate.
"Q. Now, where did you get the print?
"A. I just told you I don't know where I got that particular one. Those prints are in the possession of the sales department and advertising department and different places in the office that have to do with sales.

"Q. How did you know it was a photograph of 300?
"A. Because I was here when the first 300 was made, and I recognized it immediately.
"Q. You recognized it by its appearance?
"A. Yes.
"Q. Now, how long did you continue to sell the 300 scale?
"A. I could not say that. I suppose the scale was abandoned shortly after the introduction of the 344.
"Q. This 300 scale was never changed?
"A. No.
"Q. It continued as it was. Do you know whether you sold that scale in 1907?

"Mr. Hibben: I object to this inquiry. This witness is not familiar with the sales department, but with the manufacturing department. The examination has been along the line of the construction of the machine during the infringing period.
"The Master: Objection overruled.

"Mr. Zane:

"Q. Do you know whether you sold that 300 scale in 1907?
"A. No, I do not.
"Q. Do you know whether it was sold in 1908?
"A. No.
"Q. Do you know whether it was sold in 1909?
940 "A. No.
"Q. Do you know whether it was sold in 1910?
"A. No.
"Q. Do you know whether it was manufactured in those years?
"A. I don't know whether it was manufactured in 1907, no.
"Q. Do you know whether it was manufactured in 1908?
"A. It was not.
"Q. What?
"A. It was not.
"Q. Not made at all?
"A. It was not made in 1908.
"Q. Was it made in 1909?
"A. No.
"Q. Now, when did you first make the 344 4type?
"A. Made that early in 1907.
"Q. How long did you continue to sell that 344 type?
"A. I don't know.
"Q. Did you sell it in 1910?
"A. I don't know.
"Q. Did you sell that type in 1911?
"A. I don't know.
"Q. Did you sell that type in 1912 up to August 31st?
"A. I don't know.
"Q. Your counsel has asked you if you made certain scales during the accounting period? What were you answering, what was the accounting period?

"A. The exact accounting period I don't know.
"Q. Well, what do you mean when you say accounting period?
"A. I only base my judgment on the scales we built up to 1912 which I understand was the accounting period, early in 1912.
"Q. You didn't know then——
"A. Not positively.
"Q. —when the accounting period was when you answered that question?
"A. Not positively.
"Q. When did you think it began?
"A. I imagined that it began with the 300 type scale, the construction of that type of scale.
"Q. And what time was that?
"A. In 1906.
941 "Q. Now, the 344 type you didn't change from its first type, did you?
"A. No.
"Q. Now, do you know when you began to make the 345 type?
"A. We began in October, 1907.
"Q. Up to that time all your sales had been of the 300 and 344?
"A. Yes.
"Q. Now, October, 1907, you began with the 345? Did you begin with the 346 then also?
"A. That followed later.
"Q. How much later?
"A. That was in October.
"Q. Why, you have already given October for the 345.
"A. 346, I thought you said.
"Q. Yes.
"A. 345 was in October. Well, that would be the same month then for the 346.
"Q. How about the 347? What month did you begin that?
"A. That was in December, 1908.
"Q. December, 1908?
"A. Yes.
"Q. 348?
"A. 348 was in December, 1908.
"Q. 349?
"A. In December, 1908.
"Q. 350?
"A. That was in December, 1908.
"Q. Where did you get that information?
"A. I got it from some records or information from our assembler.
"Q. Records of the assembler?
"A. Not records, not permanent records, information as to when he built that scale.
"Q. Well, there are some records?
"A. Memorandum.
"Q. They were in a book?
"A. No.

"Q. Not in that assembling book?
"A. No.
"Q. Now, the 345, 346, 347, 348, 349 and 350, you didn't change those scales, did you?
"A. The only change was so far as the style of the chart was concerned.
942 "Q. That's all?
"A. Yes.
"Q. Nothing else?
"A. Some slight mechanical changes possibly, nothing material.
"Q. Nothing material?
"A. No.
"Q. Well, how long did you sell those 345, 346, 347, 348, 349 and 350?
"A. I don't know.
"Q. Well, you sold them during 1908, you know that, don't you?
"A. I imagine they did.
"Q. And you know you didn't sell anything but 300's in 1908, don't you?
"A. That's all we had at that time.
"Q. What?
"A. 1908, 300.
"Q. That's all you had?
"A. No, the 300 we had in 1906.
"Q. In 1908 did you sell anything but scales numbered for types in the 300's?
"A. I don't know what they sold.
"Q. Well, do you know whether those 300, 345, 346, 347, 348, 349 and 350 were sold in 1909?
"A. No, I don't.
"Q. What's the 352 type?
"A. 352, I gave that answer this morning, didn't I?
"Q. What?
"A. Didn't I answer that question this morning with reference to the different types.
"Q. I am sorry, I am not able to furnish you with information. What was the 352 type?
"A. The 352 type was a similar scale to 345.
"Q. Now, why didn't you testify to that when you were testifying this morning?

"Mr. Meads: He did.

"A. I think I did.

"Mr. Zane:

"Q. You think you did testify to the 352?
"A. Yes.

"Mr. Meads: He did.
"The Witness: That was a 20-pound chart.

"Mr. Zane:

"Q. You didn't know until you heard Mr. Meads say so, did you?

943 "A. I testified to all the number of scales in the record.

"Mr. Zane: Mr. Frye nods his head to the witness as to how to answer and you stand there, you deliberately stand there and tell him how to answer. I must ask the Master to observe Mr. Frye.

"Mr. Frye: You will notice my head bobbing in many ways, it is a habit.

"Mr. Zane:

"Q. Now, did you continue to sell those 345, 346, 347, 348, 349, 350, 352, 353 and 354—well we have at last found one. What was the 354 type? I will withdraw the first part of the question. What was the 354 type?

"A. 354 was a similar scale to 355, with a 50-pound tare chart.

"Q. Why didn't you testify to that this morning?

"A. I did.

"Q. You think you did?

"A. Yes.

"Q. Now, to go back to the other question. In 1909 did you continue to make the 345, 346, 347, 348, 349, 350, 351, 352, 353 and 354?

"A. I have no record of when we stopped the building of those scales.

"Q. You don't know when you stopped?

"A. No. I imagine they stopped over different periods.

"Q. Do you know whether you were selling those scales, 345, 346, 347, 348, 349, 350, 351, 352, 353 and 354 as late as the eight months ending August 31, 1912?

"A. I don't know.

"Q. Will you say you didn't?

"A. I don't know.

"Q. Will you say you were not selling them a that time?

"Mr. Hibben: I object to that, your Honor.

"Mr. Meads: He has answered this twice, he does not know.

"Mr. Zane: I want a direct answer to that question.

"The Master: He may answer the question.

"A. Do I know whether they were selling those scales?

"The Master: Read the question.

(Question read as follows: Will you say you were not selling them at that time?)

"A. I don't know whether they were selling them. I know nothing of the sales.

941 "Mr. Zane:

"Q. You won't say then you were not selling them at that time?
"A. I don't know anything about the sale of these scales and what years.
"Q. Oh, answer the question directly.
"A. I can't answer the question because I know nothing of the sales.

"The Master: Mr. Reeves, it is a very simple question and you can give a very simple answer to it.

(Question read.)

"A. I don't see how I can answer yes or no to it, because I don't know anything about the sales of the scales at all.

"The Master: Well, ask something else.

"Mr. Zane:

"Q. Now, in what year did you begin to make the No. 81 type?
"A. In 1909.
"Q. What time in the year?
"A. February.
"Q. Now, of that type the scales that were made were 81, 82, 83, 84, 85, 86, 87 and 88?
"A. 86. They stopped at 86.
"Q. Didn't you make an 87 and 88?
"A. Not until 1910.
"Q. Now, after you began the manufacture of 81, 82, 83, 84, 85, and 86, you never changed the style of that scale?
"A. No.
"Q. And as long as you made it you made the same scale you made originally?
"A. Yes.
"Q. In 1910 you began making the 87 and 88, did you?
"A. Yes.
"Q. What time in 1910?
"A. In July.
"Q. Where did you get that information?
"A. I could not say exactly where I did get that information, some point in the assembling room.
"Q. Somewhere in the assembling room?
"A. Somewhere in the assembling room.
"Q. Now when you went into the assembling room you saw there the record of the scales that were shipped out, didn't you?
"A. No, sir, I did not.
"Q. Didn't you ask for that?
"A. I did not ask for it.
945 "Q. You didn't want to know about that?
"A. I was not particularly interested in them, no.

"Q. Now, how did the 87 and 88 differ from the rest of those scales in the 81 series?

"A. They did not differ from them excepting the 87 was of the small housing or small chart mounted on the pendulum housing and the 88 was the small scale with the electric attachment illuminating the chart.

"Q. Now, do you know how late you continued to sell the 81, 82, 83, 84, 85, 86, 87 and 88?

"A. I do not.

"Q. Did you sell those as late as 1912?

"A. I could not say.

"Q. You don't know about that?

"A. No, sir.

"Q. Do you know whether you were selling them in 1911?

"A. I don't know.

"Q. You don't know that?

"A. No.

"Q. Now, when did you begin on the 181 type?

"A. In June, 1910.

"Q. Now, did you ever change that type of scale from the form in which you made it originally?

"A. No, except to later electrically illuminate the scale.

"Q. Well, which were the electric illuminated numbers?

"A. The 184 and 188.

"Q. And that was the only change?

"A. Yes.

"Q. And how late did you continue to sell those scales?

"A. I could not say.

"Q. Can you say whether you sold those as late as 1912?

"A. I could not tell.

"Q. Where did you get the print of the No. 345 scale that you have exhibited here?

"A. I could not say.

"Q. You don't know where that came from?

"A. No.

"Q. How do you recognize that 345 print?

"A. By being familiar with that particular machine.

"Q. Well, what is it that is particularly characteristic that enables you to say that that is the 345, what are the points about it?

946 "A. That was an entire change in design from the original scale.

"Q. Change from the 300?

"A. Yes.

"Q. How do you know the difference between the 345 print and the 81 print?

"A. Difference in the housing construction, design of the scale.

"Q. Where did you get the print Exhibit 52, that you have exhibited here?

"A. I could not say.

"Q. What did you mean to say by saying that you prepared that photograph?

"A. I had photographs from which I cut the picture as it appears on this sheet.

"Q. Oh, you mean to say you cut the picture out, that's the way you prepared it?

"A. I had it cut out and mounted on there.

"Q. And that's the way you prepared it?

"A. I had it cut from the photographs.

"Q. You don't call that a photograph, do you?

"A. It is supposed to be.

"Q. You call that a print, don't you?

"A. It is a print of a glass negative, photograph negative.

"Q. Did you say you prepared the photograph?

"A. I did not.

"Q. You didn't mean to say that?

"A. I did not.

"Q. The only way you prepared it was to have it cut out?

"A. No, the way I prepared it I found the picture that coincided to that scale and had it cut out and mounted on those cards.

"Q. Now, on the exhibit 53 where did you find that print?

"A. I could not say.

"Q. That's the 181 scale, is it?

"A. Yes.

"Q. That's not electric lighted, is it?

"A. That one is not, no. I could find no picture of an electric scale.

"Q. You have got no picture of an electric lighted scale here?

"A. Not of 181.

947 "Q. Now, all you had to do with that was to have that print cut out?

"A. Cut from a photograph.

"Q. Well, it was cut out of a piece of paper, was it not?

"A. Cut from the photograph of that scale.

"Q. This is the thing you cut out, is it not?

"A. Yes.

"Q. Or had cut out?

"A. Yes.

"Q. And this thing is what you call a photograph?

"A. Yes.

"Q. And that is all you had to do with it, the cutting of it out, is it not?

"A. No, I found the photograph to have the work done.

"Q. You found this print and had it cut out?

"A. Yes, and had it cut out and mounted on there.

"Q. Do you know where you got the print of exhibit 54?

"A. No, I could not say.

"Q. All you had to do with that was to find the print and have it cut out and mounted on that piece of paper?

"A. Yes, verify the photograph with my knowledge of those scales.

"Q. Well, you selected that as a picture of the No. 381?

"A. Yes, I did.

"Q. Do you know how late the scales of the 181 type were sold?

"A. No, I do not.
"Q. Do you know how late they were manufactured?
"A. I could not say.
"Q. Are you manufacturing them now?
"A. No.
"Q. When did you stop manufacturing?
"A. I could not say.
"Q. About when?
"A. I could not say.
"Q. Give us the year.
"A. I can't.
"Q. Do you know whether those scales of the type of 181 were being sold as late as the period of the first eight months in 1912?
"A. I would not know.
"Q. You have no way of knowing?
"A. No.
948 "Q. Do you know where you got the picture on exhibit 56?
"A. I do not.
"Q. All you had to do with the preparation of it was identifying the picture, having it cut out and placing it on here?
"A. Yes.
"Q. And would the same answer apply to Exhibit 57 and Exhibit 58?
"A. Yes.
"Q. I notice you have been testifying from some memoranda you have before you. When did you make those memoranda?
"A. I made it up from time to time during the period of the last 30 days.
"Q. And those memoranda contained the information that you got in various ways?
"A. Yes.
"Q. And those memoranda you have been testifying from here, have you?
"A. Not entirely from this, no.
"Q. Well, you have been looking at your memoranda?
"A. Yes, occasionally.
"Q. What?
"A. Yes.
"Q. To see what the statement was on the memoranda *to* regard to something, have you not?
"A. Certainly I referred to it.
"Q. Sir?
"A. Certainly I referred to it.
"Q. Allow me to see your memoranda.
"A. (Witness hands memoranda to Mr. Zane.)
"Q. Have you any other there?
"A. No, nothing pertaining to this. Loose notes I made about certain things.
"Q. This is the memoranda which you had?
"A. Yes.
"Q. Now, you have on this memorandum the first words 'Price

list, 300, November, 1906, original 20# cylinder,' that's the first entry on the memorandum, is it not?

"A. Yes.

"Q. What did you put the words above 'Price list' for?

"A. I simply put it on there to refer to the time about when the scale was put out for sale, and not when the models or parts were made.

949 "Q. Where did you see the price list showing when that scale was first put out?

"A. I didn't see any price list. That would refer more particularly to scales down here made in 1913 and 1914.

"Q. Now, the 344 was put out in March, 1907, was it not?

"A. Yes.

"Q. Where did you get that information?

"A. I could not say.

"Q. 345 was put out, according to this memorandum, in October, 1907?

"A. Yes.

"Q. Where did you get that information?

"A. I could not say.

"Q. The 346 was put out at the same time? Where did you get that information?

"A. I could not say.

"Q. The 347 scale was put out in December, 1908. Where did you get that information?

"A. I could not say.

"Q. The 348 was put out in December, 1908, was it not?

"A. That's as near as we could arrive at the date, yes.

"Q. The 349 scale was put out at the same time, was it not?

"A. The same time.

"Q. The 350 scale was put out at the same time, was it not?

"A. The same time.

"Q. And you can't tell us when you got any of that information?

"A. No, sir.

"Q. Now, the 81 scale was put out in February, 1909?

"A. Yes.

"Q. The 82, 83, 84, 85, and 86 were put out at the same time, were they not?

"A. I imagine they were. I have no dates on that.

"Q. Where did you get that information?

"A. I don't know, I gathered that from miscellaneous sources.

"Q. What did you mean by this entry at the bottom here, 'No scale in 81 series until 1910, July, when styles 83, 84, 87, 88 were in force'?

"A. That's a memorandum that I had instructions to look up this noon.

950 "Q. And you looked it up, did you?

"A. I looked it up, yes.

"Q. Now, the 181 scale was put out in January, 1910, was it not?

"A. January or June (examining memorandum).

"Q. Look at it, which is it?

"A. It is pretty rotten writing, I would say in January, though.

"Q. And the 182, 183, 184, 185, 186, 187, 188, 351, 352, 353 and 354 were all put out at the same time, were they not?

"A. As near as I could find out.

"Q. When were the 581 scales put out?

"A. According to the information I have been able to get, it was in March, 1911.

"Q. March, 1911. The 581 was blue finish only?

"A. Yes.

"Q. All the other scales were made in blue and gold both?

"A. No, the 300 scale was not I would not think. The 81 types were not.

"Q. They were all in blue, were they?

"A. They were in blue—no, they were green.

"Q. Green?

"A. Green. I think the 181 series was not put into gold until—I don't think they were put into gold until later, at least.

"Q. Until later?

"A. Until they established the new system of numbering the scales 83, 84, 87 and 88.

"Q. Well, all your scales that were not in blue or green were in both colors, blue and gold, were they not?

"A. Blue and gold.

"Q. All of them?

"A. Not the 300's.

"Q. Well, you didn't get the question. All that were not exclusively in blue or in green were in the two colors, blue and gold?

"A. Blue or gold, yes.

"Q. You had no scale that you made in gold exclusively, did you?

"A. No, I don't think there was.

"Q. Now, this memorandum that you have had, is this in your handwriting?

"A. That's my writing.

951 "Q. Now, did you give us the date when you first put out an electric lighted scale?

"A. No.

"Q. Well, what was the date?

"A. I could not say without looking it up.

"Q. Do you know the date when you first put on the double spirit level?

"A. No.

"Q. Well, can you approximate it?

"A. No, I could not. I will answer that electric light question by making that date, setting that date at July, 1910, the first 381 scales were built with electric illumination.

"Q. Now, when do you say that stirrup construction was first embodied in a cylinder scale?

"A. I said the one that's in that scale was put on in 1911.

"Q. What time in 1911?

"A. I testified on that before.

"Q. Well?

"A. January.

"Q. January, 1911. Now, when do you say the shock absorber — put in?

"A. I testified on that date?

"Q. What was it?

"A. Why, read it from the record.

"Q. No, you are on cross examination, you answer it. When was that shock absorber put in?

"A. It was in August, 1910?

"Q. August, 1910. What did you mean by your answer that the shock absorber was put in cylinder scales beginning in January, 1911?

"A. I changed that statement.

"Q. What?

"A. I changed that when I went to the scale.

"Q. You changed that to August, 1910?

"A. Yes.

"Q. All right, just so we get the date as you best can give it. Now, on your scale you notice the pendulum as it moves through the arc that it describes in weighing moves faster at certain parts of that arc than at other parts, don't you?

"A. It moves at different degrees according to the amount of weight on the platter, yes, that is, it shows a greater arc at certain places for a certain weight.

952 "Q. Well, it moves at a different velocity at different parts of the arc, does it not?

"A. It moves at different degrees for the same amount of weight.

"Q. It moves through a greater or smaller space?

"A. Yes.

"Q. In the arc?

"A. Yes.

"Q. Now, how do you overcome that on your scale?

"A. We overcome it by the cam.

"Q. You have a cam there arranged on such a curve as to make the transmitted motion of the pendulum a uniform motion when it is communicated to the cylinder, don't you?

"A. Yes.

"Q. Now, how do you make that connection between the pendulum and the cam?

"A. The cam has cheeks fitting over the pendulum through which an arbor carrying the pendulum pivot——

"Q. What do you mean by an arbor?

"A. I mean a plug or a shaft extending through the hole locking the pendulum and the cam so the cam will rotate on this arbor.

"Q. Don't you have a strap here?

"A. We have a strap on the cam connecting it to the pendulum.

"Q. That's the point.

"A. No, connecting it to the lever.

"Q. Yes, the lever.

"A. Yes.

"Q. And the strap passes over the cam, does it not?
"A. Yes.
"Q. And by means of that strap passing over the cam the communicated motion is made uniform?
"A. Not uniform.
"Q. It is made uniform?
"A. Yes, uniform.
"Q. When communicated to the cylinder?
"A. Yes.
"Q. Now, was that strap in your first cylinder scale?
"A. Yes.
"Q. At the time you began making cylinder scales in 1906 were any other scales using that strap construction?
"A. I don't know.
953 "Q. You don't know?
"A. No.
"You still retained in your construction the strap?
"A. Yes, sir.
"Q. And the cam?
"A. Yes.
"Q. Made on a curve which is not the exact arc of a circle?
"A. I would say it is the exact arc of a circle, but it is not concentric with the pinion and pivot.
"Q. It moves about a center which is not the center of the circle of which is is an arc?
"A. Yes.
"Q. And that's what makes it a cam.
"A. Yes.

"Mr. Zane: Mark this memoranda produced by the witness for indentification Plaintiff's Exhibit 58.")

("Said memoranda marked for identification Plaintiff's Exhibit 58.")

"WILLIAM ERNEST SEATREE, recalled, resumed the stand for further examination.

Direct examination.

By Mr. Meads:

"Q. Mr. Seatree, you have been sworn in this case before?
"A. Yes.
"Q. Mr. Seatree, have you made any calculation as to the profits of the Toledo Scale Company for years other than the year 1911 which you testified you had specially analyzed upon the basis of the facts disclosed by your examination of that year specifically?
"A. You mean as between cylinder and fan scale business?
"Q. Yes.
"A. Yes, I have.

"Q. Take, for instance, the year 1907, what have you done to endeavor to determine the amount of profits divisible between the fan scale and cylinder scale business for that year?

"A. I first of all referred to the company's trial balances and profit and loss accounts as contained in the typewritten sheets.

954 "Q. Just get, if you please, the sheets which you took as a starting point.

"A. The typewritten sheets marked collectively Plaintiff's Exhibits 9 to 15, the one relating to the year 1907 about which you have inquired being numbered Exhibit 13.

"Q. That is Plaintiff's Exhibit 13, is it not, so marked?

"A. I said Plaintiff's. There is a statement on that exhibit which sets forth the revenues and expenses and net profits of the combined business for the year 1907, that is to say, without separating the cylinder scale business from the fan scale business.

"Q. Is that the figure which you took as a starting point for that year?

"A. Yes, the figures drawn off from here in summarized form are the figures that I used as a starting point showing a net profit for the year 1907 of all business, including Canadian business and so forth, of a certain figure.

"Q. Well, with that exhibit before you, Plaintiff's Exhibit 13, what was that figure of all business?

"A. That was $45,954.20.

"Q. How much, forty-five thousand what?

"A. $954.20.

"Q. Where does that appear on Plaintiff's Exhibit 13?

"A. At the foot of the second page. It also appears in the balance sheet as being the net profit carried into the balance sheet which is in the same exhibit.

"Q. With that figure of $45,954.20 as a starting point what did you do?

"A. I summarized the profit and loss account with gross revenues and expenses from those sheets onto this working sheet which I have before me.

"Q. Have you your original working sheet before you now?

"A. Yes.

"Q. When you say you summarized those just tell in detail what you did, Mr. Seatree.

"A. Well, I took on the one side the sales and on the other side the expenses classified as to the general groups. For instance, in these sheets the commercial and selling expenses are enumerated in detail and the factory operating or overhead expenses are enumerated in detail, but instead of enumerating all those details I footed them and used one figure for each group of expenses.

955 "Referring to your working sheets, what figures did you group in the summary about which you are now testifying?

"A. Well, for example, commencing with the sales, the gross sales are stated in this Plaintiff's Exhibit 13 at the sum of $616,154.80. That includes new scales, domestic business, second-hand scales and

Canadian scales. I divided that total figure accordingly on my sheets showing separately the new sales which were $611,682.30, the second-hand $850.00 and the Canadian sales were $3,632.50 which were included in that sum.

"Then as regards the costs, where the costs happened to be summarized already, they appear on the sheets, on the front sheet and when the total is carried over onto the second sheet so I really used the figure there.

"Q. By the method you have adopted you found a certain amount as the gross sales for that year, did you not?

"A. Yes.

"Q. What were those gross sales for that year?

"A. The gross sales of new cylinders excluding sales in Canada, $611,682.30.

"Q. That was the total income derived from cylinder scales?

"Mr. Zane: We object as leading.

"Mr. Meads:

"Q. What does that figure represent?

"A. It represents the total sales both cylinder and fan.

"The Master: Exclusive of Canada?

"A. Exclusive of Canada.

"Mr. Zane: And second-hand?

"A. And exclusive of second-hand.

"Mr. Meads:

"Q. With that figure of gross sales exclusive of second-hand and Canada, what did you do to determine what amount of that business was cylinder scale business and what was fan scale business?

"A. I accepted Marwick, Mitchell, Peat & Company's analysis as to what was cylinder.

"Q. Have you a copy of Marwick, Mitchell, Peat & Company's or the plaintiff's report in this case?

"A. Yes, I have. It shows there as $154,758.00.

"Q. Just a minute, Mr. Seatree. On what page of the Marwick, Mitchell report which is commonly known as Plaintiff's Exhibit 40, at what page of that exhibit is this division as between fan and cylinder scales shown which you accepted?

"A. The division between fan and cylinder scales is not
956 shown at all, but on a page which is not numbered in my copy and is headed "Toledo Computing Scale Company Profit on Manufacture and Sale of Cylinder Scales for the year ended December 31, 1907.

"Q. You are referring now to Basis No. 1?

"A. Basis No. 1.

"Mr. Zane: Year 1907, first page.

"A. It appears that the $154,758 was cylinder scale sales, new. I adopted that figure and in accordance with the testimony that had

previously been given in Mr. Hall's evidence the residue I regarded as the new fan scale sales amounting to $456,924.30.

"Q. That is the way you divided the two classes of business?

"A. Of sales, yes, sir.

"Q. Having arrived at those two figures, to-wit, $154,758 for the cylinder scale business and $456,924.30, what did you next do?

"Mr. Zane: Wait a minute. You have a copy of this account, have you not? Give us a copy. Why are you holding it back?

"Mr. Meads: I have no copy.

"Mr. Zane: What is the paper you have before you?

"Mr. Meads: This will be disclosed. I have no copy of what he is testifying to now if that's an answer to your question.

"Q. Having arrived at these two figures which you have just testified to, what did you next do, Mr. Seatree?

"A. I next took the amount of $850 as shown to be the sale of second-hand scales and extended it out into a third column which I called second-hand.

"Q. So then you had before you three statements of the gross amount of three classes of business?

"A. Yes, sir.

"Mr. Zane: We object to this style of examination as leading. He is able to tell what he did without any leading from one thing to another and all of its suggesting, telling the witness what he did first, what he did next, and what he did next. This is an expert witness. He can testify without that sort of leading.

"Mr. Meads:

"Q. What did you do next, Mr. Seatree?

"A. The nex titem was the charge-backs, the amount of charge-backs as shown on Plaintiff's Exhibit 13.

"Q. Which page of Plaintiff's Exhibit 13?

957 "A. It is the second page, it shows $43,003.46.

"Q. With that figure of forty-three thousand dollars and plus of charge-backs taken from Plaintiff's Exhibit 13 what did you do?

"A. I treated as the proportion appertaining to the cylinder scale business——

"Mr. Zane: Give us the originals of those exhibits here of which you have appropriated the carbon copies.

"Mr. Meads: I think I ought to object to that language. If there has been any appropriation here, the other side has done the appropriating.

"Mr. Zane: We want something to look at. They can use the originals better than these.

"The Master: The witness is probably more familiar with these than the originals.

"Mr. Meads: Mr. Zolg, will you get the originals?
"(To the witness:) Did you finish the last answer?
"(Last question and partial answer read.)
"A. The summary of $6,922, being the amount shown under Plaintiff's Exhibit 40, page 1 of Basis 1, showing the results for the year 1907, $6,922, and I treated the difference between that and $43,000 as representing the proportion applicable to the fan scale business, being $36,081.46.
"Q. What next did you do, Mr. Seatree?
"A. I next took the charge for Exchange Scale Allowances amounting to $24,737.50.
"Q. From what place did you take your basic figure there?
"A. Plaintiff's Exhibit 13.

"Mr. Zane: Twenty-four thousand what?
"A. $24,737.50. That represented the total Exchange Scale Allowances.

"Mr. Meads:

"Q. And with that figure for the total of Exchange Scale Allowances or $24,737.50 as a starting point, what did you do?
"A. I apportioned that to cylinder scale business and fan scale business on the basis of the experience of the year 1911 as determined by the analysis to which I have previously testified.
"Q. The year 1911, what sort of an analysis did you make of that item?

"Mr. Zane: We object, he has already gone over all that.
"The Master: I think he gave his analysis of 1911 on his
958 other examination, Mr. Meads. Is it necessary to go into it again?
"Mr. Meads: I don't suppose it is necessary, if your Honor please. It is merely so the court can follow that he is now attempting to express these various bases by something he has done specifically. If it is well in the mind of the court, I don't suppose it is necessary.
"The Master: I don't remember anything about it and won't remember this probably very long.
"Mr. Zane: This is useless repetition.
"The Master: Well, if it is not a long description, go ahead.
"Mr. Meads: The answer would be one word.

"Q. What was the character of your analysis of this item in question for the year 1907?

"Mr. Zane: I object, and the objection is this. We had to cross examine once. He will state it over again and then we will have to cross examine over again. That's the objection.
"The Master: Well, he may answer the question in this connection.

"(Question read.)

"A. We divided the allowances recorded on the books in the year 1911 as between cylinder scale business and fan scale business, according to the sale, whether it was a cylinder sale or a fan sale, and in that way traced the allowances to the class of business, cylinder scale business or fan scale business.

"Mr. Meads:

"Q. Now, following that method with the figure $24,737.50, before you, what did you do with this allowance?

"A. I applied to the sales of the year 1907, that is to say, cylinder sales and fan sales respectively the relative percentage ratio as determined by the 1911 experience and ascertained what the allowances applicable to cylinder and fan would be on the basis of that ratio. The sum of those two resulant figures exceeded $24,737.50 and I therefore reduced them pro rata, that is to say, the only way of expressing it would be I apportioned the $24,737.50 on the basis of what it would have been on the 1911 percentage experience and in that way I got a charge of $11,071.15 applicable to the cylinder business and $13,666.35 as a charge against the fan business.

"Q. What was the next charge, if any, which you at-
959 tempted to distribute charged to the business for the year 1907?

"A. The next item was the manufacturing cost of the scales sold.

"Q. From what place did you take the total manufacturing cost?

"A. From Plaintiff's Exhibit 13 in the sum of $181,535.32 less the increase in the stock during that year which of course had not been sold, being $30,196.12.

"Q. You deducted that from the manufacturing cost?

"A. From the gross cost.

"Q. And where did you get the item of Increase of Stock from, Plaintiff's Exhibit 13?

"A. From Plaintiff's Exhibit 13. Then to those figures I added $1,200 of insurance and $1,653.62 of taxes which I took out of the commercial expenses. They are also shown in this Plaintiff's Exhibit 13.

"Q. Shown in Plaintiff's Exhibit 13?

"A. Yes, sir.

"Q. On what page?

"A. Page 1.

"Q. With the deduction for the Increase of Stock and the addition of the last two items what was the total of such manufacturing cost?

"A. $154, 192.82.

"Q. With that item of $154,000 plus as a starting point, what did you then do?

"A. I divided that between cylinder scale business and fan scale business by prorating it on the basis of the experience of the 1911 costs. In other words, I calculated what the average cost would be on the basis of the same ratio of cost to sales for cylinder and fan respectively in the year 1911 and then prorated this sum of $154,192.82 on that basis. In other words, the costs might be more or they might be less in their relationship to sales, but I preserved the

differential between the cylinders and fans that was experienced in 1911.

"Q. Applying that ratio and making the division in the manner which you have testified, what amount did you charge to the cylinder scale business as the manufacturing cost for the year 1907?

"A. The sum of $28,948.47 and to fan $125,241.35.

960 "Q. What other item of charge to the business did you next consider?

"A. Commissions to agents.

"Q. What figure did you take as a starting point for this calculation?

"A. The figure of commissions which appears in Plaintiff's Exhibit 13 on page 1, $194,757.15. It is on that page grouped with the commercial expenses and I took it out of the commercial expenses and treated it separately.

"Q. With that charge of $194,757.15 as a starting point, what did you then do?

"A. I divided that between the cylinder business and the fan scale business in a similar manner.

"Q. When you say in a similar manner, on the basis of what division?

"A. I ascertained what the commissions charged to cylinder and fan respectively would be on the basis of the ratio of the commission shown for the year 1911 on that part of the sale on which a commission is paid, that is to say, after deducting the allowances on which they didn't pay a commission—they only paid a commission on the cash part of the sale—and ascertained on that basis that the ratio of commission on the cylinder business I think was about 31% and on the fan business was 30% and on second-hand was 28 or 29%. I applied those ratios to the sales for the year 1907 and found what the commission would be on that basis and then I pro rated the actual amount recorded on the books in the year 1907 of $194,757.15 on that basis.

"Q. Following the method which you have described, what amount of commission did you charge to the cylinder scale business?

"A. The sum of $50,378.28 and to the fan business $144,099.87.

"Q. What was the next thing which you did, Mr. Seatree?

"A. I apportioned the rest of the commercial and selling and general expenses.

"Q. From what source did you take the figure which you sought to apportion, that is, the gross amount?

"A. From Plaintiff's Exhibit 13.

"Q. Just show how that is composed.

"A. Their total commercial and selling expenses which included commission is $346,273.98 which appears on page 2 of Plaintiff's Exhibit 13. As I stated, that includes commission $194,-

961 757.15 which I previous- dealt with, it includes insurance 1,200 which I previously dealt with, taxes $1,653.62 which I previously dealt with, bond interest $5,087.51 which I took out and charged later, ordinary interest $269.32, and an item of repairs on scales of $160.29. If these items were eliminated, it would have left a net figure of $143,106.67.

"Q. All of this elimination you treated either before or after?

"A. Yes, some I have already treated and the others I treated down there.

"Q. With this figure which you now state of $143,106.67 before you what did you then do?

"A. I ascertained what ratio that bore to the total sales, to the gross sales, and apportioned it on the basis of the gross sales of cylinder and fan respectively.

"Q. Applying that method of distribution to that charge, what proportion or what amount did you charge to the cylinder scale business?

"A. $36,156.30 and to the fan business $106,751.78.

"Q. What after that division did you next do?

"A. I pro rated back to cylinder and fan scale business the net salvage on the second-hand business which was a trifling amount in this particular year.

"Q. How much was it?

"A. It was $532.70. I pro rated that back on the basis of the allowances charged to that account.

"Q. And following that method how much did you put back into the cylinder business?

"A. $238.41.

"Q. And how much in the fan business?

"A. $294.29.

"Mr. Zane: What do you mean by allowances charged to that account?

"A. I pro rated it back on the basis that I charged the allowances taken on exchange scales.

"Mr. Meads:

"Q. What after the apportionment of this item which you have just testified to did you next do to determine the profits for the year 1907?

"A. Those are all the charges dealt with up to that point.

"Q. Well, having apportioned those charges as charges to the respective branches of the business, what then did you do?

"A. I struck a balance as to what the profit was.

"Q. And what did you find the total charges to be?

962 "A. I have not footed them but I can foot them for you.

"Q. Very well. You obtained the profit to this point without any further charges by adding together the various charges and subtracting them from the receipts, did you not?

"A. Yes, sir.

"Mr. Zane: Quit leading.

"Mr. Meads:

"Q. Mr. Scatree, what then did you find, if you did so find, the profits to this point on the respective businesses to be?

"A. I find the profit of the combined business to be $52,894.99. That's the profit of the combined business up to that point which

according to my division is contributed as follows: From the cylinder business $21,281.80 on total cylinder sales of $154,758, and fan profits $31,080.49 on total fan sales of $456,924.30.

"I might explain there that those are the profits, the total being the profits shown by these sheets and my division of that profit deducting any allowance for bond interest, interest on floating debt, depreciation or any bad debts written off, and also before bringing in any profit on the Canadian business.

The sum of those items which I have referred to as not being taken into consideration accounting for the difference between $52,894.99, the combined profits which I divided, and the net profits after deducting those excluded items of $45,954.20.

"Q. That is a reconcilement of your item of $52,000 plus with the item on Plaintiff's Exhibit 13 of $45,000 plus?

"A. Yes, sir.

"Q. You show about $7,000 in round numbers difference?

"A. Yes. Shall I give the items or not?

"Q. We had better go on, Mr. Seatree.

"Mr. Zane: That does not give your total.

"The Witness: I forgot to add a small bracketed item in each case. Instead of being $21,281.80, it should be $21,520.21, and the other item instead of being $31,080.49 should be $31,374.78; that makes $52,894.99.

"Mr. Meads:

"Q. Having arrived at this point, what did you next do?

"A. I summarized the results for each year and then I deducted from them an allowance for losses on agents' balances and customers' accounts and a charge for interest on capital invested.

963 "Q. The first deduction which you next made from these profits was what?

"A. An allowances for losses on agents' balances and customers' accounts.

"Q. Losses on agents' balances and customers' accounts. What figures did you take for such losses?

"A. Three per cent of the gross sales.

"Q. Three per cent of the gross?

"A. Yes, which of course included the sales of second-hand as well as new.

"Q. Do you know what figure was adopted by Marwick, Mitchell, Peat & Company in Plaintiff's Exhibit 40 for this same item?

"A. Approximately the same amount. It was three per cent I think of the net sales.

"Q. Three per cent of net sales?

"A. Yes.

"Q. I think you have already explained, Mr. Seatree, why you took three per cent of gross sales instead of three per cent of net sales. I think you did on direct.

"A. I think I did, yes.

"Q. Well, we won't stop on that feature. Now, applying your

method of three per cent of gross sales for this next deduction, what was the amount of such deduction?

"A. As applicable to the entire business $20,371.98 of which $4,654.16 was a charge against the cylinder business and $13,721.82 was a charge against the fan business.

"Mr. Morse: What's the trouble?

"The Witness: That should be $18,375.98.

"Mr. Meads:

"Q. What was the next item of deduction, if any, which you made?

"A. A deduction for interest on money invested in the business.

"Q. What was the amount of that deduction for the year 1907?

"A. $21,161.00.

"Q. At what rate did you compute interest?

"A. Five per cent.

"Q. How did you determine what elements composed the principal sum on which you computed this interest?

"A. I took the total investment in net tangible assets, that is to say, regarded from the standpoint of money which is represented by the amount of preferred and common stock, plus the amount of the bonds, plus the amount of the floating debt, surplus and undivided profits added together from which I deducted the intangible values representing good will, trade marks, and so forth, and this reduced it to the net investment, that net investment being represented by tangible assets less current liabilities such as unpaid merchandise bills, and so forth.

964

"Q. What was that principal sum January, 1907, the start of the year?

"A. At January 1, 1907, it was $400,746.38, and at the end of 1907 it was $459,359.32, having increased during the year. I ascertained by monthly calculation what the average increase was and found that the average increase for the whole year was $22,491.31 so the average investment during the year 1907 equivalent to the entire year was $427,237.69 on which I calculated five per cent which made $21,161 as the interest on the investment.

"Q. How did you distribute this item of $21,000 plus of interest?

"A. I charged $5,353.81 to the cylinder business and $15,807.19 to the fan business.

"Q. You say you divided this item of interest between the fan and cylinder business in the amounts which you have just testified. On what basis, Mr. Seatree?

"A. On the basis of sales.

"Mr. Zane: Gross or net?

"A. I think it was gross, I am not sure (examining papers), gross sales.

"Mr. Meads:

"Q. What next did you do to determine whether any profits had been made on these respective branches of the business for the year 1907?

"A. I deducted the sum of the amounts allowed for losses on agents' and customers' accounts and for interest on investment from the profits arrived at according to the manner which I explained this morning, leaving a net profit or loss on the cylinder and fan scale business respectively.

"Q. Of what amount?

"A. For the year 1907 a profit on the cylinder business of $11,-512.24 and on the fan business of $1,845.77 on that basis.

"Q. Have you with you your working papers showing the result of the business in question for the year 1906 or that portion thereof which is in controversy?

"A. Yes, sir.

"Q. Will you please turn to them?

965 "A. (Witness produces papers.) Yes.

"Mr. Meads: I took 1907 first because that's the first full year.

"Q. To determine what profits, if any, were made in this business for the year 1906 what did you do?

"Mr. Zane: Before we go any further, they have not offered here anything except the testimony of the witness, they have not offered an account or anything like that. Now, we move to strike out all the testimony of this witness for the year 1907 arrived at as he has stated because it is apparent that his statements are incompetent. It does not go to the weight of his evidence, it is absolutely incompetent because he has found pro rating charges in the year 1907 on the basis of the year 1911. Now, that can't be of light on any subject because the thing he is pro rating is expenses, not on the experience of the business or anything of that kind, but pro rating his experience of a year that is six years away or four years away in this case.

'The Master: Well, the motion to strike I think goes more to the weight to be given to this testimony than its admissibility. I will deny the motion to strike.

"Mr. Meads:

"Q. What did you do, Mr. Seatree, first?

"A. I followed the same general procedure I have outlined in respect to the year 1907, that is to say, I started with the profit and loss and trial balance for the year 1906 marked Plaintiff's Exhibit No. 14.

"Q. What figure did you take as a starting point?

"A. Took the sales after deducting the Canadian sales.

"Q. On what page of Plaintiff's Exhibit 14 does it appear?

"A. Page 2 of Plaintiff's Exhibit 14.

"Q. And what is the amount which you took as a starting point from that exhibit?

"A. I took the gross sales there shown of $536,292.75 from which I deducted the Canadian sales of $9,607.75, making a net figure of $526,685.

"I then took the charge-backs as shown in the same exhibit.

"Q. On what page, Mr. Seatree?

"A. Page of Plaintiff's Exhibit 14.

"Q. Being an amount of what?

"A. Of $39,075.24.

"Q. And what did you do with those charge-backs?

"A. I divided them between the cylinder and fan scale
966 business by adopting the amount shown in Marwick, Mitchell, Peat & Company's statement, Basis 1, 1906.

"Q. Turn to it.

"A. Which shows the total of $216.00 of those charge-backs were applicable to the cylinder scale business, and by deducting that from the total amount I had a net amount of $38,859.24 as representing the residue applicable to the fan scale business. I then took the item of Exchange Scale Allowances amounting to $18,554.45 which I apportioned to cylinder and fan scale business respectively on the basis of what it would have been calculated at the ratio to sales disclosed by the analysis I made for the year 1911.

"Q. And applying that rule what did you find?

"A. Of the total amount of allowances of $18,554.45 I had $478.13 chargeable to the cylinder business and $18,076 chargeable to the fan scale business.

"I then adopted a similar course in respect to the manufacturing costs. The total expenditures on material, labor and overhead amounted to $119,817.13.

"Q. From where did you get that figure?

"A. Plaintiff's Exhibit 14, page 2, from which I deducted in this case a decrease in stock, or rather I did not deduct, I added a decrease in stock because that increased the cost of sales of $2,744.19.

"Q. Where did you obtain the figures of $2,000 plus, this decrease of stock?

"A. From Plaintiff's Exhibit 14, page 2. I then added to that insurance $675.00 and taxes $1,816.46 taken from page 1 of the same Exhibit No. 14.

"Q. Having made those additions, what was the total amount of the charge in question?

"A $125,052.78.

"Q. What did you do with that?

"A. Of that I charge $939.13 to cylinder business and $124,113.65 to fan business on the basis, that is to say, pro rating the $125,052.78 on the basis of what the costs would have been calculated at the ratio the costs bore to the net sales in the year 1911.

"Q. What did you then do?

"A. The next item was commissions which is shown on page 1 of Plaintiff's Exhibit 14 at $154,734.45. That I pro rated as based on what the pro-ration would have been on the basis of the ratio of
commissions to net building values for the year 1911, thereby
967 having a charge of $1,738.66 against the cylinder business and $152,995.79 against the fan scale business.

"Q. What next?

"A. I next apportioned the commercial and selling and general expenses. The total commercial expenses shown on page 2 of Plaintiff's Exhibit 14 was $302,541.38 as enumerated on pages 1 and 2, the enumeration showing that included therein is commission $154,734.45, bond interest $3,600.01, other interest $1,235.41, insurance $675.00, and taxes $1,816.46, repairs to scales $614.31. By eliminating those items I was left with a net amount of commercial and selling and general expenses to pro rate of $139,865.74. I found what ratio that was to the total gross sales and pro rated it on the basis of gross sales, thereby having a charge of $1,529.61 to cylinder business and $138,336.13 to fan scale business. In that particular year the second-hand business, if there was any, was not shown separately so I didn't have a second-hand account.

"Q. What did you do next, Mr. Seatree?

"A. Struck a balance to find what the profits were at that point and found the total profits of the combined business to be $48,788.03 of which I have $851.79 on cylinder business, being the profit on $5,544.60 of sales, that is to say, after deducting charge-backs, and a profit of $47,936.24 on corresponding sales for the fan business of $482,065.76.

"Q. Having arrived at those profits, what did you then do?

"A. I then deducted the allowance for agents' losses and for interest on investment, the losses on agents' balances as calculated at three per cent of the gross sales were chargeable to cylinder business $172.80, and chargeable to fan business $15,627.75. Interest on investment I had chargeable to cylinder scale business $198.00, to fan scale business $17,904.

"Q. Without going into the details of the interest investment, you computed it at what rate of interest?

"A. Five per cent.

"Q. And followed the methods you have described for computing such interest for the year 1907, did you?

"A. Yes, sir, which left me with final net profits for the year 1906 of the cylinder business $480.99, and fan business $14,404.49.

"The profits for the year 1908 were determined on exactly the same basis as the other years. I took the figures contained
968 in the yearly statement for that year, Plaintiff's Exhibit No. 12, on which the new scales sold were shown as $903,718.31. This does not include the Canadian scales as they were shown separately on that Exhibit. From that figure I deducted the cylinder scale gross sales of $459,372.50 shown on the report of M. M. P. & Co. Basis No. 1, for the year ending December 31, 1908. This left a residue of $444,345.81 applicable to the fan scale business. The item of second hand scales sold $21,647.10 I accepted as correct and put into the second hand account.

"The amount of Charge Backs, $57,640.42, was shown on the yearly statement, Plaintiff's Exhibit 12. I accepted $22,295.75 as shown by M. M. P. & Co.'s statement to be chargeable to cylinder scale business, and the balance $35,344.67 represents the properties chargeable to fan scale business.

"The Exchange Scale Allowances amounting to $82,905.26 were taken from the yearly statement and were pro rated between cylinder and fan scales in the same manner as I have already described for the preceding years, charging $23,791.05 to fan business, $58,828.67 to cylinder business, and $205.54 to second hand business.

"The Manufacturing Cost shown on the yearly statement, Plaintiff's Exhibit 12, totals $207,624.92. I added to this Taxes $1,997.40 and Insurance $1,500.00, and deducted stock increase $24,704.75, all shown on the same exhibit, making a total manufacturing cost of $186,417.57, which I pro rated in the same manner as described in respect to the years 1906 and 1907, which gave me a charge of $76,962.18 for cylinder and $109,455.39 for scale business.

"The Commissions were shown on page 1 of the yearly statement, Plaintiff's Exhibit 12, as $333,080.41, I pro rated this amount in the same manner as for the previous years, and found chargeable to cylinder scale business $164,179.36, to fan scale business $160,639.19 and to second hand $8,261.86.

"I then took the Commercial Expenses shown on page 1 and 2 of the yearly statement, Plaintiff's Exhibit 12, totalling $183,738.70 and apportioned this account on the basis of gross sales as described in respect to the previous years. I charged against cylinder scale business, $91,212.08, against fan $88,228.42 and against second hand $4,298.20.

969 "I then struck a balance of the second hand account and pro rated the net salvage of $7,787.93, giving to cylinder business, $5,545.33, and to fan business $2,242.60. I then struck a balance and found that the gross profit of the combined business before deducting Bond and other Interest, Depreciation or Bad Debts written off, was $80,569.48, which was divisable to cylinder business $51,439.79 and to fan business, $29,129.69.

"I then deducted the Losses on Agents' and Customers' Accounts figured at 3% of the gross sales, and Interest on Investment computed at 5% on the capital invested. The Losses on Agents' and Customers' Accounts applicable to cylinder business was $14,243.59 and to fan business $13,517.37. The Interest on Investment chargeable to cylinder business was $14,024.88 and to fan business $13,566.12. This leaves the final net profits for 1908 on the cylinder business $23,171.32, and on the fan business $2,046.20.

"To determine the profits for the year 1909, I summarized the results of the year's business from the profit and loss accounts as shown on the yearly statement for that year, Plaintiff's Exhibit 11. I took the sales in the United States, $1,187,532.15, foreign sales, $33,413.59, in making $1,220,945.74. Second-hand sales of $48,345.70 I threw into my second-hand business. Of the new scale business of $1,220,945.74 I accepted the amount shown in M. M. & Co.'s account, Plaintiff's Exhibit 40, of $605,466.41, for cylinder scales, and leaving a balance of $615,479.39 for fan scale sales.

"Toledo Scale Charge Backs, shown on page 2, of the yearly statement, Plaintiff's Exhibit 11, as $81,264.99, was applied to cylinder scales, in the same amount as shown on M. M. P. & Co.'s state-

ment, Exhibit 40, $49,358.33 which left a residue applicable to fan scale business of $31,906.66.

"The Exchange Scale and Toledo Scale allowances totaling $82,-779.23 were apportioned in the same manner as described in connection with the preceding years resulting in a charge against cylinder business of $57,757.21, fan scale business $24,546.98 and second hand business $475.04.

"The Manufacturing Cost shown on page 2 of the yearly statement, Plaintiff's Exhibit 11, as $300,699.45 was subject to
970 certain adjustments which were made by the company between the taking off of the statement and the final closing of the books. We have given effect to those adjustments to bring our figures under the same basis as the figures of M. M. P. & Co., and the result is that the actual manufacturing cost is reduced to $283,218.25, there being also a similar adjustment as to materials. From this amount I have deducted the increase in the United States stock scales as shown on Plaintiff's Exhibit 11, page 2, $45,863.91, less an adjustment of $2,248.33 and I added taxes, $2,257.75, and insurance, $1,650.00 giving me a final cost figure to apportion between the fan and cylinder business of $239,013.76. This amount was pro rated on the basis described in connection with the preceding years, charging against cylinder business $92,109.63 and against fan scale business $146,904.13.

"The Commissions as shown on page 1 of the yearly statement, Plaintiff's Exhibit 11, are $420,013.02, which amount I pro rated on the basis described for the preceding years giving me a charge against cylinder business of $194,152.13, fan scale business, $209,-242.87, and second hand business $16,618.02.

"The Commercial and Selling Expenses as shown on page 2 of the yearly statement of Plaintiff's Exhibit 11, includes Commissions, which I have dealt with in the preceding item, Interest, Preferred Stock Dividend, etc., which I deal with later and have deducted here, and also the adjustments of M. M. P. & Co., which we adopt, leaving a net figure of $275,014.28, which was apportioned on the basis of sales as in the preceding years, charging $131,184.93 to cylinder business, $133,354.40 to fan scale business, and $10,-474.95 to second hand business.

"I then struck a balance on the second hand business and found a profit of $19,830.46 which I apportioned as in the preceding years on the basis of the allowances charged to cylinder and fan scales business respectively, giving to the cylinder scale business $13,-916.08 and to the fan scale business $5,914.38.

"Thus for the year 1909 the gross profit of the cylinder business was $94,820.26 on total new sales of $556,108.08 and the fan business $75,438.67 on sales of $583,572.67. From these profits I deducted Losses on Agents' and Customers' Accounts calculated at 3%
of the gross sales, taking from cylinder profits $19,181.79
971 and from fan profits $18,896.95, and deducted for Interest on Investment applicable to the cylinder scale business $15,-734.89 and to the fan scale business $15,995.11. Thus I found the

net profits for the cylinder business for the year 1909 to be $59,-903.58 and for the fan business to be $40,546.61.

"Mr. Meads:

"Q. Have you made any calculation as to the profits, if any, of this business for the year 1910?

"A. Yes.

"Q. Have you your working sheets for that year with you?

"A. Yes.

"Q. Will you tell the court what you did to determine such profits, if any?

"A. I started with Plaintiff's Exhibit No. 10 for the year 1910. On pages 1 and 2 the new scale sales are shown at $1,286,263.68 and the foreign sales at $26,720.21.

"Mr. Zane: Where do you get your foreign sales?

"A. Page 1 of Plaintiff's Exhibit No. 10. I might draw attention here to clear the record: There are some adjustments apparently in this particular one between the first and final closing, minor differences which are given effect here. Of that the proportion representing cylinder business as given in Marwick, Mitchell, Peat & Company's statement of profits for the year ended December 31, 1910, is $789,358.11, leaving as fan scale sales $523,625.78. The second-hand scale sales as shown on page 1 of that same exhibit are given as $53,879.97 and the rebuilt scale sales $38,227.82, making $92,-107.79, which I treat as second-hand scale sales.

"The next item is the charge-backs which appear as $97,653.60, page 1 of Exhibit No. 10. Of that amount Marwick, Mitchell, Peat & Company's statement for the year 1910 shows $66,732.35 as appertaining to cylinder. I have therefore treated the balance of $30,921.25 as appertaining to fan.

"The next item is the cylinder scale allowances shown at $90,-502.22 on Exhibit No. 10 and the Toledo scale allowances of $10,-857.65, the two together making $101,359.87. That I apportioned on the basis previously described making a charge to cylinder scale business of $78,614.89, and to fan scale business $21,800.22, and to second-hand $944.76.

"The next item is the manufacturing cost. There were some adjustments in that year also in the final closing of the books after these preliminary statements had been prepared which were
972 given effect to. The net result being that as compared with the figure of $338,053.66 appearing on this page 1 of Exhibit No. 10 the total amount that I had as representing material, labor and factory expenses, including refinishing expense, was $340,-494.32. The refinishing expense, $10,573.74, I charged to the second-hand business. That left $329,920.58 from which I deducted a stock increase of $22,190.89 as shown on page 1 of Plaintiff's Exhibit No. 10, giving $307,729.69 to which there was to be added insurance and taxes taken from the commercial expenses $6,134.88.

"Mr. Zane: For both?

"A. Yes, combined, making $313,864.57. That I divided on the

basis previously described, $154,138.10 to cylinder scale business and $159,726.47 to the fan scale business.

"The next item is commissions. The total amount is $410,267.62.

"Mr. Meads:

"Q. Commissions as shown by what?

"A. I will have to figure it out. The trial balances are a little different after that date. As a matter of fact, it appears in Marwick, Mitchell, Peat & Company's statement on page 2 for that year $410,267.62.

"Q. That amount you took from Marwick, Mitchell, Peat & Company's report?

"A. No, I didn't. I took it from here.

"Q. It appears also on page 2 about three-quarters of the page down?

"A. Yes. It is in two items there at the top of the third page from the last, it appears in two items, agents' commissions $384,210.55, district managers' commissions $26,057.07, the two together making $410,267.62. That I apportioned in the manner previously described, charging to cylinder scale business $224,356.54 and to the fan scale business $157,612.33 and $28,298.75 to second-hand. Then the remainder of the commercial and selling expenses, there were also some slight adjustments in the commercial and selling expenses which have been given effect to by Messrs. Marwick, Mitchell, Peat & Company, but eliminating the insurance and taxes and commissions, a credit item on repairs and an item of royalties and minor credits, there was a small item there, we were left with a net figure to apportion of $354,099.69. That I apportioned on the basis of sales as follows: To cylinder scale business $198,927.56, to fan scale business $131,959.88, to second-hand $23,212.25. I then struck a balance on the second-hand account which showed a profit on
973 that basis of $26,893.84 which I credited to the cylinder and fan scale business on the basis of the allowances charged to the two departments respectively, giving a credit of $21,055.16 to cylinder and $5,838.68 to fan, leaving me with profits up to that point before deducting agents' losses and interest on investment of $87,643.83 cylinder and $27,444.31 fan. Then deducting the agents' losses as calculated on the basis of three per cent of the gross sales I deducted in respect of cylinder business $25,844.07 and fan $16,308.67. I also deducted interest on capital invest- as calculated at the rate of five per cent and apportioned on the basis of gross sales from the cylinder profits $28,556.71 and fan $18,943.29, leaving net profits for the cylinder business of $33,243.05 and a net loss for fan business of $7,807.65.

"Q. Mr. Seatree, what have you done, if anything, to determine the profits, if any, earned by this business for the so-called 1912 period up to August 31, 1912?

"A. I took the profit and loss on Plaintiff's Exhibit No. 9 as a basis, taking most of the figures from page 4, and found that the new scale sales as shown at the head of that page amount to $840,664.11,

that the foreign sales amount to $26,718.80 and that the supply sales were $1,977.79, making a total of $869,360.70. Of that I credited to cylinder business the sum of $516,216.61, the amount shown to be the cylinder scale sales in Marwick, Mitchell, Peat & Company's statement of account for the eight months to August 31, 1912, Basis 1, and the balance of $353,144.09 I treated as representing the fan scale sales.

"The next item I dealt with was charge-backs amounting to $71,084.98 which also appears on the third page of Exhibit 9. Of that amount I treated $47,184.90 as representing the charge-backs on cylinder scale business as shown by Marwick, Mitchell, Peat & Company's statement of account for that period and the balance of $28,900.08 I treated as representing fan scale sales.

"Q. Charge-backs applicable to fan scale sales?

"A. Applicable to fan scale sale business. The next item was the allowances. The monthly profit and loss account contained in Plaintiff's Exhibit 9 shows exchange allowances $55,465.58, Toledo scale allowances $22,650.26, special allowances *marring* $4,918.71, miscellaneous $8,544.01, the total amount being $91,578.56.

974 That I divided as appertaining to cylinder, fan and second-hand scale business respectively on the basis described this morning, thereby charging to cylinder scale business $70,177.13, to fan scale business $20,068.95, to second-hand scale business $1,332.48.

"The next item I dealt with was second-hand scale sales shown on Plaintiff's Exhibit 9, second-hand scales $8,518.30, refinished scales $36,064.50, refinished competitors' scales $50,588.00, the three together making $95,170.80 which I treated as second-hand scale sales. Against that there were charge-backs as follows: Second hand scale charge-backs $1,063.00, refinished Toledo charge-backs $2,011.50, refinished competitors' charge-backs $6,224.00. Those three items being shown on Plaintiff's Exhibit 9, $9,298.50, which I treated as charge-backs against the second-hand scale sales.

"The next item was the manufacturing cost which appears on Plaintiff's Exhibit 9 in the sum of $230,150.24. That includes the item of $10,045.20 for refinishing expense on used or second-hand scales which are charged to the second-hand department, and to the balance amounting to $220,115.04 I added insurance $1,156.08, taxes $3,847.78, making $225,109.90, from which was deducted the sum of $31,763.13, representing the increase in the United States stock as shown on page 3 of the Plaintiff's Exhibit No. 9. The net figure of $193,345.77 I divided as between cylinder and fan scale business on the basis described this morning, thereby charging to cylinder scales $93,545.46 and to fan scale business $99,800.31.

"The next item is commissions to agents which is included in the commercial and selling expense on page 3 of Plaintiff's Exhibit 9, but which is shown in a separate item at the top of page 2 of said exhibit in two amounts, agents' commissions $240,884.27, district managers' and branch office commissions $10,328.91, the two together making $251,213.18. That total I apportioned as between

cylinder, fan and second-hand scale business respectively on the basis described this morning, thereby charging to cylinder scale business $129,919.97, to fan scale business $96,755.98, to second-hand business $24,537.23.

"The rest are the commercial expenses, the commercial expenses set out on page 4 of Plaintiff's Exhibit 9 amounting to $544,734.73 which include the amount of commissions already enumerated as shown on page 2 and the following items shown on page 3, bond interest $1,166.66, other interest $1,781.14, insurance $1,156.08, taxes $3,847.78, freight inbound $2,800.82. Those items
975 enumerated, including the commission of $251,213.18, leaves a net amount to prorate of $266,769.07 which I prorated on the basis of gross sales as follows: To cylinder scale business $142,774.63, fan scale business $97,672.20, and to second-hand scale business $26,322.24. That concludes all the charges, and I then struck a balance on the second-hand account and found that the profits on that basis on the second hand business or the salvage was $20,834.33 which I then prorated as between cylinder and fan scale business respectively on the basis of the ratio which the allowances on exchange sales had been charged to these two divisions of the business, giving credits as follows: To the cylinder scale business $16,201.16, to the fan scale business $4,633.17. I then struck a balance on the cylinder and fan scale business and had profits for the cylinder scale business at that point of $48,815.68 and fan scale profits of $19,579.74. I then deducted losses on agents' and customers' accounts as calculated at the rate of three per cent of gross sales, from the cylinder scale profits, $17,753.35, and from the fan scale profits $11,242.59. I then made a further deduction for interest on investment in the manner described this morning, thereby having a charge against cylinder scale profits of $29,689.44 and against fan scale profits $20,310.56. The net result after making these deductions being a profit for cylinder scale business of $1,372.89 and a loss for the fan scale business of $11,973.41.

"Mr. Meads:

"Q. Mr. Seatree, in computing the charge for interest on certain of the years you have not given the amount on which you computed interest at the first of the year. In order that the record may be straight, have you those amounts before you?

"A. Yes, sir.

"Q. In 1906 on what amount did you start to compute interest on capital invested?

"A. On January 1, 1906, the total investment in the entire business was $330,979.04. During 1906 the investment was increased until at the end of 1903 it was $400,746.38, there being an increase during the year of some $70,000 more or less, the aggregate increase, however, throughout the entire year as calculated monthly was $31,127.69.

"Q. Which you added to the amount at the beginning of the year?

"A. Of $330,979.04.

"Q. And computed interest on what sum?

976 "A. This giving a total of $362,106.73, five per cent. of which is $18,105.

"Q. 1907 you have already described. Now, turn to 1908 and state the amount of capital invested at the beginning of that year?

"A. At the beginning of that year the investment was $459,359.32. At the end of 1908 it was $676,944.93, an increase of $217,000 in round numbers, it, however, being accumulated through the year. Taken by months the average was $92,459.15, making the average investment for the year 1908 $551,818.47. Five per cent of which would be $27,591.

"Q. For the year 1909 what was the investment at the beginning of the year?

"A. The beginning of the year it was $676,944.93.

"Q. Was there an increase during the year?

"A. There was an increase at the end of the year up to $919,463.64, but most of that money came in at the end of the year and the result was because of some substantial charge-offs which had been made at the beginning of the year the average was really $42,350 less than it was at the beginning of the year, in other words, it made a dip and then came up again so I actually deducted $42,350 from $676,944.93 and used the sum of $634,594.26, five per cent of which would be $31,730.

"In 1910 the investment at the beginning of the year was $919,463.64. At the end of the year it was $1,138,158.61, an increase as between the beginning and end of the year of $219,000 in round numbers. The average increase, however, was $92,214.59, so that the average investment during the year 1910 was $1,011,678.23. From that I deducted the investment in the Canadian business which was the first year I understand there was any Canadian business, materials and equipment and receivables, and so forth, $45,786.02, leaving a net investment applicable to the cylinder and fan scale business, domestic and foreign, $965,892.21, which, however, since there is a bare possibility I might not have deducted enough for the Canadian part of it, being an estimate, I carried at $950,000, in other words, I discounted from the first figure the sum of $15,892.21.

"Q. And computed interest on what?

"A. On $950,000 which gave me $47,500.

"Q. What did you do in the year 1911 which we have not touched yet?

"A. At the end of 1910 or the beginning of 1911 the in-

977 vestment was $1,138,158.61. At the end of the year it was $1,145,991.22. During the early part of the year it was less and consequently there was an average reduction instead of an average increase and the average investment for the entire year was therefore $1,130,188.79, from which I deducted the investment in Canada and vulcanizer materials and equipment, $54,211.43, and estimate of receivables $35,000 and vulcanizer business $468, making a total deduction of $89,679.43.

"Q. Leaving a balance on which you computed interest of what?

"A. No, it left a balance of $1,040,509.36, but as I had previously made a rough estimate I computed interest on $1,000,000.

"Q. You computed interest on a flat million?

"A. A flat million, and it was $40,509.36 more.

"Q. In 1912 for the eight months period.

"A. I made a similar computation and found that the average investment was $1,039,870.94, and I used a million for this.

"Q. And you computed interest on a million?

"A. I did.

"Q. For eight months?

"A. Well, I was just fixing it to make it eight but I actually did it on a year. There should be an adjustment, in other words, I used $50,000 which is one year and it should be two-thirds of that.

"So that would be subject to correction by that amount.

"Q. Just figure that, the reduction for the four months.

"A. You would have to deduct a third, it would be $33,333.34.

"Q. Instead of $50,000?

"A. Instead of $50,000.

"Q. Mr. Seatree, will you just take the time right now on your sheets before you to make that correction with this interest figured for eight months instead of twelve?

"A. Yes, I have it now.

"Q. With that correction of interest for the eight months how about the year as you figured it, what correction do you wish to make in your testimony?

"A. I want to change the figures for interest on investment as regards cylinder business from $29,689 to $19,792.96 and fan from $20,310.56 to $13,540.38,, correspondingly to increase the profits of the cylinder business from $1,372.89 to $11,269.37 and to
978 reduce the loss of the fan business from $11,973.41 to $5,203.23.

"Q. You mean to reduce that loss to a profit of $5,000?

"A. No.

"Q. To a loss of $5,000?

"A. Yes.

"Q. Now, Mr. Seatree, what did you do in order to keep in connected form, if you did do anything, to determine in this connection the profits for the year 1911?

"A. Yes, I first of all transcribed the statement of profits or losses contained on pages 1 and 2 of Defendant's Exhibit 21 which was our general statement.

"Q. Yes, go right on without any questions and tell what you did.

"A. I transcribed that to commence with and then I adjusted the figures therein contained to give effect to the adjustments about which I testified I think on the last occasion of my giving testimony.

"Q. Were those preserved in any form of exhibit?

"A. Yes, sir.

"Q. Exhibit 26 it is marked I think.

"A. 26.

"Q. That adjustment just briefly is what?

"A. That was to give effect to a revision of the account to place them on the theory that all repossessed scales were sold as new.

"Q. 26 changed the account so that all repossessed scales were taken as if sold as new scales, is that right?

"A. Yes, sir.

"Q. Instead of second-hand scales?

"A. To give effect to those adjustments.

"Q. Now, having done that, what did you do?

"A. I recalculated the percentages I wanted to use in respect to allowances, costs and commissions that I wanted to use as a basis for apportionment in all the other years, and I also, for the purpose of bringing them onto a comparative basis with the other years, I wrote back or eliminated the allowances on agents' accounts which I had already charged in that statement and also eliminated the interest on the investment I had already charged because I was going to deal with it collectively for the whole series of years later, and I did one other thing, revised the basis of apportionment of salvage or profit on the second-hand business to an apportionment on the
979 basis of the allowances I had actually charged. In other words, letting it follow the utterances instead of following the sales or units contributed because we have not the units contributed for the other years.

"Q. So you followed the allowances as you have done in all these other years save 1911?

"A. Yes, I have.

"Q. So that there is going to be a uniform system of calculation?

"A. So far as the charging of allowances against cylinder and fan scales and the apportionment of the salvage or profit on the second-hand business, they are on the same basis.

"Q. They are all even?

"A. Yes.

"Q. Having done that, what did you next do to determine the profits for 1911 or to incorporate them in this list of profits?

"A. I then incorporated them in there with one slight exception, that in order to bring them into accord with the books, there was an item of $528.53 which previously we had merged with the agents' losses reserve. I allowed that to stand as a charge, so I brought it into line with the books and that brought it down to the same basis as each of the other years and put it on a comparable basis.

"Q. Have you your working sheets before you?

"A. Yes.

"Q. Just tell what you did.

"A. I got profits for the cylinder scale business of $37,812.43 and for the fan scale business $3,298.55, both of those before deducting agents' losses on investment.

"Q. Having obtained those figures, what did you next do?

"A. I deducted an allowance for losses on agents' balances and customers' accounts and interest on investment the same as I did for the other years and thereby deducted——

"Q. How much was that deduction?

"A. $26,621.24 for the cylinder and $16,294.54 for the fan busi-

ness, and interest on investment $30,349.50 for cylinder, and $19,-650.50 for the fan, leaving a loss on the cylinder business of $19,-218.31, and a loss on the fan scale business for that year of $32,-646.49.

"Q. Have you made an addition to the net profits or losses on the cylinder and fan business respectively for this period after making the adjustment of interest on that item of eight months?

980 "A. Yes, sir.

"Q. Have you computed it, an addition of these various amounts?

"A. Yes.

"Q. What is such total?

"A. After deducting the losses on agents' accounts and interest on investment you have a net total for the period from January 1, 1906, to August 31, 1912, a profit of the cylinder business of $120,362.24, and a profit on the fan business for the same period of $13,185.70.

"Q. Now, Mr. Seatree, turn back if you please to the exhibit showing the net profits for the year 1906, being Plaintiff's Exhibit 14, and your working papers for that year, have you those before you?

"A. I have, yes, sir.

"Q. Have you the report before you of Marwick, Mitchell, Peat & Company, Plaintiff's Exhibit 40?

"A. Yes, sir.

"Q. What as shown by the books were the profits for the year 1906?

"A. Page 2 of the monthly profit and loss account and trial balance, Plaintiff's Exhibit No. 4, shows a total profit for the entire business, including the cylinder and fan scale business and Canadian business and everything, royalties and so forth, if there were any, of $47,902.86.

"Q. What did you do, if anything, to that figure as a starting point to determine the profits for the year 1906 as shown by this trial balance in the way of adjustment?

"A. To bring that figure onto a comparable basis with the computations I was making to show the result before I deducted agents' losses and before deducting any interest of any kind I added back to that $47,902.86 the interest which had been deducted in arriving at the $47,902.86.

"Q. Just tell the items.

"A. Two items, bond interest which appears on page 1 of that exhibit and is included in the commercial expenses of $3,600.01, and other interest $1,235.41, the two together making $4,835.42, I added that back. I also deducted from it, that is to say, from the sum of the two, the profit shown on page 2 of Plaintiff's Exhibit 14 as being the profit on the Canadian business and which was included in arriving at the $47,902.86. I deducted that from the sum and got the sum of $48,788.03 which was the profit before deducting any interest or losses on agents' accounts.

981 "Q. Which is all predicated on the Plaintiff's Exhibit, the figures?

"A. Yes.

"Mr. Zane: You didn't give the Canadian profit?
"A. $3,950.25.

"Mr. Meads:

"Q. With the figures $48,788.03 as a starting point and according to the report known as Plaintiff's Exhibit 40, how was that book profit divided in that account?
"A. In the Plaintiff's Exhibit 40 it was not divided, but part of it was taken, the part which appertained to the cylinder business.
"Q. On the plan adopted by them?
"A. The profit they show as applicable to cylinder business, $555.96. That figure, however, was after deducting $166.32 for agents' losses which is not on the books, so I added that back which gives $722.28, so they are then both on a comparable basis, the book figure including cylinder and fan business combined, the Marwick, Mitchell, Peat & Company figure referring only to cylinder business.
"Q. And deducting this sum of $722.28?
"A. It leaves the sum of $48,065.75, being the profit realized on the fan business for that year.
"Q. On the Marwick, Mitchell basis?
"A. Yes, sir.
"Q. On the basis computed by you what are those figures?
"A. For the cylinder business I have $851.79 as compared with their $722.28 and for the fan business I have $47,936.24 as compared with the $48,065.75, being the residue left after deducting the Marwick, Mitchell, Peat & Company profit.
"Q. Turn to your working sheets for the year 1907 if you please and to the report of Marwick, Mitchell, Peat & Company for the year 1907, and to the statement, Plaintiff's Exhibit showing the year 1907, have you those before you?
"A. I have, yes.
"Q. Go ahead.
"A. The monthly profit and loss business and the trial balance marked Plaintiff's Exhibit 13 for the year 1907 shows a profit of $45,954.20 which is an amount arrived at after deducting bond interest, other interest and a sum of depreciation. I therefore put it on a basis comparable with the other.
"Q. Tell the exact figures.
982 "A. I added back to the $45,954.20 first of all the sum of $2,457.11, an amount which had been deducted for depreciation as shown on page 2 of that exhibit. I also deducted the sum of $629.32 for interest and that's floating debt interest, and $5,087.51 bond interest which shows on page 1 of that exhibit, these sums having been deducted in arriving at the profits first stated.
"Q. You mean you added them back, don't you?
"A. I added them back I meant to say. I then deducted the Canadian profits on page 2 of that exhibit which had been included in the figure of $45,954.20, amounting to $1,233.15. The net of those adjustments gives a profit before deducting and depreciation and exclusive of profits on Canadian business of $52,894.99.

"Q. Turn to Plaintiff's Exhibit 10 if you please.

"A. Yes.

"Q. And show or state on the basis of that exhibit how those profits were divided.

"A. They don't show what the residue of fan profits would, be, but——

"Q. Well, there were no profits other than fan and cylinder, what is not one is the other?

"A. Exactly. They show for cylinder profits $23,707.77. That figure was after deducting depreciation $303.13 and losses on agents' balances and customers' accounts $4,441.71. So I added that back to get it to a comparable basis and had then $28,452.61 before deducting losses on agents' and customers' accounts.

"Q. That's on cylinder business?

"A. That's on cylinder business.

"Q. That subtracted from the whole profit left a balance of how much as applicable to the fan business?

"A. $24,442.38.

"Q. Your division of profits for the same period shows what?

"A. Cylinder profits $21,520.21, and fan profits $31,374.78.

"Q. These are both, of course, before deducting any interest on capital invested or deduction for agents' accounts?

"A. Yes, they are.

"Q. Will you turn to your working sheets for the year 1908 and the Plaintiff's Exhibit covering such period and to the report, Exhibit 40?

"A. The company's monthly profit and loss account,
983 marked Plaintiff's Exhibit 12, for the year 1908 shows a profit from all sources of $75,156.83. That is after deducting, as shown on page 1 of that exhibit, bond interest $4,999.99, other interest $4,671.86, and also as shown on page 2 depreciation of $2,058.47. On the other hand it also includes profits on the Canadian business as shown—it is not shown in one item, it is shown in three items on page 2.

"Q. Give the items.

"A. It shows the sale on one side $15,262.50, and on the other side Canadian scale purchases $3,784.50, and Canadian business expense $5,160.33, the sum of the latter two subtracted from the first gives a profit of $6,317.67.

"Q. Which amount you deducted from the total amount obtained by adding the three items first mentioned, is that right?

"A. The profit first recorded, yes, sir, giving a profit exclusive of profit on Canadian business and before deducting bond and other interest and depreciation of $80,569.48.

"Q. Now, will you turn in Plaintiff's Exhibit 40 and show how that profit was distributed on the basis of that exhibit?

"A. They show $58,543.49 as profit on the cylinder scale business. That, however, is after deducting, as shown on that exhibit, page 2 of it, losses on agents' accounts $13,447.79, and depreciation on buildings $303.13. By adding those back you get a profit of

$72,294.41 as being the profit appertaining to the cylinder scale business as computed by Marwick, Mitchell, Peat & Company.

"Q. And leaving a residue of?

"A. Of $8,275.07 as representing the profit on the fan scale business.

"Q. As against their division which you have just testified to, what was your division for the period in question?

"A. As compared with their $72,294.41, we show a profit of $51,439.79.

"Q. For what?

"A. Cyl. scale business.

"Q. And for fan business.

"A. They show a profit of $8,275.07, while we show a profit of $29,129.69.

"Q. Will you turn to your working sheets for the year 1909 and the Plaintiff's Exhibit covering the period in question?

"A. Yes.

984 "Q. Plaintiff's Exhibit 40 or such portion thereof as treats of the period in question?

"A. Yes.

"Q. Have you those before you?

"A. Yes, I have. This is the year when there were some adjustments made. The first closing showed a profit of $137,543.32.

"Q. Did you give the exhibit?

"A. The monthly account for the year 1909, Plaintiff's Exhibit 11, shows a profit of $137,543.32. There were some adjustments between that and the final closing of the books which increased the profits to $148,377.70, that's $10,834.38 additional in the final closing. Commencing with that $148,377.70, that figure was after deducting bond interest shown on page 1 of Plaintiff's Exhibit 11 $4,187.48, other interest $12,962.78, preferred stock dividend $11,338.50, and a write off from some customer's accounts of $9,146.89. The sum of those four items, add that to $148,377.70 and deduct the Canadian profits as shown at the foot of page 2 of that exhibit amounting to $15,754.42, thus leaving as profits of the combined business other than profits from the Canadian business and before deducting interest charges, preferred dividends and the write off in respect to the customers' accounts of $170,258.93.

"The profit appertaining to the cylinder scale business as shown by Plaintiff's Exhibit 40, the statement of Marwick, Mitchell, Peat & Company is $100,759.24 as shown at the foot of page 2. That is after deducting $17,391.02, losses on agents' accounts shown on page 2, and $303.13 for depreciation also shown there which added to the sum of $100,759.24 would give total profits before deducting these items of $118,453.39 which deducted from the combined profit of $170,258.93 gives a profit appertaining to the fan scale business of $51,805.54.

"Q. And for the same period what is your apportionment or division of such profits?

"A. For the cylinder scale business we show profits of $94,820.26

as compared with $118,453.39 shown by Marwick, Mitchell, Peat & Company's statement as adjusted.

"Q. And the fan?

"A. And the fan profits we show $75,438.67 as compared with $51,805.54, what their figure would be.

"Q. It is their figure with these items which are preserved to the business added?

985 "A. I am referring to the fan.

"Q. Now, will you turn to the year 1910?

"A. The profit shown on Plaintiff's Exhibit 10 for the year 1910 at the foot of page 2 is $109,720.99. That is the profit after deducting interest as shown in the figure just preceding the amount of profit of $24,129.42 made up of interest on bonds $1,749.96, and other interest $22,379.46. It is also after including the profit on the Canadian business shown on the same page of Plaintiff's Exhibit 10, of $20,103.64 and a loss on the vulcanizer business which is eliminated on the preceding page of $1,397.54. There was also a miscellaneous item which seemed to be an adjustment between the commercial expense of $56.17.

"Those items eliminated gives profits of $115,088.14 before deducting interest and exclusive of the profits on the Canadian business. Plaintiff's Exhibit 40, Marwick, Mitchell, Peat & Company's statement for the year 1910 shows a profit on cylinder scale business, page 3 of that exhibit, of $106,191.93 which is after deducting $303.13 for depreciation and $23,321.79 for losses on agents' and customers' accounts. If those items be added back, the total profits appertaining to cylinder scale business as computed in that statement would be $129,816.85 as compared with a profit of the combined business, cylinder and fan together, of $115,088.14 which would leave a loss on the fan scale business of $14,728.75.

"Q. On the basis of Plaintiff's Exhibit 40?

"A. Yes, sir.

"Q. Now, actually as computed by you what were the respective profits on that year?

"A. We show profits before deducting losses on agents' accounts or interest on investment of $87,643.83, derived from the cylinder scale business and $27,444.31 derived from the fan scale business.

"Q. Now, for the year 1911, will you make a statement of the same comparative figures?

"A. I have not got it for the year 1911 in exactly the same shape. I used the figures we had previously.

"Q. Well, use the figures you had previously, it does not make any difference as long as they are in the case.

"A. Surely. Well, referring to page 5 of defendant's Exhibit 21——

"Q. That's the detail report for 1911?

"A. Yes, that's our original statement.

986 "Q. Very well.

"A. We made a reconcilement there showing what the profits were as shown by the books before charging losses on agents' balances to be $33,276.25.

"Q. That appears on page 5 of that exhibit?
"A. Yes.
"Q. Very well.
"A. There being in that instance adjustments between the monthly statements and the book figures.
"Mr. Zane: Is that after deducting interest?
"A. Yes, that was the profits as shown by the books before charging losses on agents' balances, but after deducting interest of all kinds and consequently I didn't work—the year 1911 I didn't work from the monthly statement.

"Mr. Meads:

"Q. No, you worked from the exhibit in question.
"A. Yes. Now, that $33.276.25 was the total profits as shown by the books before charging losses on agents' Accounts. There should be added back to that the interest on borrowed money, $28,-432.90. That's made up of $26,682.96, regular interest, and $1,-750.04, bond interest.
"Q. Those you added back first?
"A. Those we added back. That gave $61,709.15 as the total profits before deducting the interest. From that should be deducted the proportion of profits earned on the Canadian business and from royalties. The Canadian business profits were $24,080.32 and the royalties were $1,392.71. From the sum of those two items added, the $61,709.15 first mentioned, should be deducted the loss on the vulcanizer business.
"Q. How much?
"A. $4,774.86 which makes profits from the operation of the combined scale business before charging losses on agents' balances $41,110.98.
"Q. Now, that profit was distributed on the basis of Marwick, Mitchell's report how?
"A. They showed $95,679.43 as being the profit from the scale business.
"Q. Cylinder business?
"A. Cylinder scale business.
"Q. Cylinder scale alone $95,000?
"A. Yes. However, that sum was after deducting $21,770.14, losses on agents' balances as appertaining to the new scales and shown on page 2 of plaintiff's Exhibit 40, and $303.13, de-
987 preciation. It is also after deducting 60.40% of $2,844.61, being the loss on agents' balances appertaining to the second-hand business of $1,718.14. It is also after deducting a portion of an item 60.40% of an item of $922.48, by which they adjusted the commercial expenses, and $147.50 by which they adjusted the factory expenses. 60.40% of those two sums is $557.18 and $88.98. These items should be added back to the $95,679.43. The total comparable profit is $120,117.00 applicable to cylinder business and a loss of $79,006.02 applicable to fan scale business.
"Q. On the basis adopted in Plaintiff's Exhibit 40?

"A. Yes.

"Q. Now, as against that profit of $120,000 plus attributable to cylinder scale business and the loss of $79,000 plus chargeable to fan scales, what division of profits did you make for that same period?

"A. I made a profit for the cylinder business of $37,812.43 and a profit for the fan scale business of $3,298.55.

"Q. Now, for the year 1912, Mr. Seatree, the 1912 period?

"A. On Plaintiff's Exhibit 9 for the year 1912 on page 4 the profit is shown as $66,627.72. That is after deducting $1,166.66, bond interest, and $17,781.14, other interest, together making $18,947.80, which are shown on page 3 of Plaintiff's Exhibit 9. It is also after deducting a loss on the vulcanizer business shown on page 4 of Exhibit 9 of $1,422.33. It is also after including a profit on the Canadian business of $18,047.31 as shown on page 4 in two items, Canadian sales gain $11,875.12 and Canadian increase in stock $6,172.19, making $18,047.31. It is also after including royalties from Avery & Company of $555.12. If those profits and those interest charges and the vulcanizer loss be excluded, the profit would be raised from $66,627.72 to $68,395.42 as the combined profits of the cylinder and fan scale business, excluding Canadian.

"Q. As shown on the basis of this statement?

"A. Yes.

"Q. By that I mean Plaintiff's Exhibit 9.

"A. Yes.

"Q. Now, on the basis of Plaintiff's Exhibit 40 for the eight months ending August 31, 1912?

"A. They show a profit appertaining to the cylinder scale business of $73,768.95. That is after deducting, as shown on page 2 of said exhibit, losses on agents' accounts, $16,047.33, losses on customers' accounts, $1,505.43, and depreciation on buildings, $348.34,
988 and also 58.76% of $2,576.16, being the losses on agents' accounts appertaining to the second-hand business, the proportion of which would be $1,513.75. If those items be added back, the profits before deducting those losses would be $93,183.70, being on the par value or a comparable basis with $68,395.42, the combined profits.

"Q. That would leave as a residue a loss on the fan scale business of?

"A. Of $24,788.28.

"Q. Now, in that same period how did you distribute or divide the profits?

"A. We showed a profit for the cylinder scale business of $48,815.68 and a profit for the fan scale business of $19,579.74.

"Q. The summaries of the amounts given by you in your testimony today, have they been preserved by you in any form of written instrument, typewritten instrument?

"A. Yes, there is my manuscript copy and the typewritten copies you have.

"Q. You have before you the working sheets preserving these items, have you, in your own handwriting?

"A. Yes, sir.

"Q. And have you prepared for the assistance of the Master, if he desires it, a duplicate of that?

"A. I have, yes, sir. That's it.

"Q. Does that contain the totals which you have testified to today?

"A. Yes, sir.

"Q. In that instrument which you have identified there appears an item above all these figures of 1905 prior to the introduction of cylinder business. From what did you take the figures in that item?

"A. Monthly profit and loss account for the year 1905 marked Plaintiff's Exhibit 15.

"Q. Plaintiff's Exhibit 15?

"A. Yes, sir.

"Q. Those figures have not been included in anything you have testified, have they?

"A. No, sir.

"Q. What are the totals of the fan business for the year 1905 shown by Plaintiff's Exhibit 15?

"Mr. Zane: You mean your yearly statement?

"Mr. Meads: Your exhibit in the case.

989 "Mr. Zane: Well, it is the company's yearly statement. What's the use of calling it ours?

"Mr. Meads: That's the best way to identify it. It is an exhibit offered by Mr. Zane.

"A. The net sales after deducting Canadian sales and after deducting scales returned were $466,264.13. That is on page 2 of Plaintiff's Exhibit 15. It is in the summary of $514,498.09, gross sales, from which I have deducted the Canadian sales, $16,292.50, and the second-hand sales, $31,941.45, making a total deduction of $48,233.95 giving the net figure of $466,264.13.

"Q. All of which figures you take from Plaintiff's Exhibit 15?

"A. Yes, sir.

"Q. What are the net profits for that period as shown by Plaintiff's Exhibit 15?

"A. On page 2 of that exhibit profits on scales made in the United States excluding profits on the Canadian business are $61,879.57 which is the profit after deducting bond interest, $2,037.49, and other interest, $1,807.51, the two together make $3,845. If they be added back, the total profit, exclusive of the profit on the Canadian business, would be $65,724.57.

"Q. During that year are there any cylinder scales?

"A. There are none shown on this statement.

"Q. So all those profits in your tabulation you have——

"A. Treated as foreign scale profit.

"Q. Mr. Seatree, for the year 1906 what figure did you use as the amount of the new sales, if you did use any figure for cylinder scales?

"A. $5,554.

"Q. Now, from what source did you obtain that figure?

"A. Plaintiff's Exhibit 40.

"Q. From what source did you get the figures for the net sales of fan scales?

"A. By deducting the first figure from the total sales as testified to today.

"Q. In each of these years other than 1911 the amount of net sales of fan scales was obtained how?

"A. By deducting from the total sales the sales said to be cylinder scale sales as shown by Plaintiff's Exhibit 40.

"Q. The profits for the year 1905 as testified to by you were what per cent if any, of the net fan sales?

"A. 14.3%.

990 "Q. For the year 1906 the profits, if any, on the old scales were what percentage of the business?

"A. The total profits, that is to say, the profits, before deducting losses on agents' balances or interest on investment, for the year 1906 were 10% of the combined net sales for that year.

"Q. As computed by Marwick, Mitchell, Peat & Company in Plaintiff's Exhibit 40 what were those same profits on cylinder scales?

"A. On the same basis, that is to say, before deducting losses and interest, they were 13.02%.

"Q. And what on fan scales following that same system?

"A. On the relative fan sales they would have been 9.97.

"Mr. Zane: You mean on net sales?

"A. Yes, sir.

Mr. Meads:

"Q. As computed by you, what were the profits on cylinder scales for the year 1906?

"A. 15.36.

"Q. Per cent?

"A. Per cent of net sales.

"Q. And what was the profit on fan sales?

"A. 9.94% on the fan sales.

"Q. In that particular you gave the cylinder scales what difference in per cent between that given by Plaintiff's Exhibit 40?

"A. 2.34.

"Q. And in dollars and cents what was the difference in the amount of profits, if any, which you gave to the cylinder scales?

"A. We gave $129.51 more than they did.

"Q. For the year 1907 what was the profit on the entire business of the company, domestic business of the company?

"A. It was equivalent to 9.3% of the total net sales of that year.

"Q. 9.3%?

"A. Yes.

"Q. On the cylinder business what was the profit as computed by Marwick, Mitchell, Peat & Company?

"A. Expressed in a percentage, 19.24, and a relative profit on fan scale business would be 5.81.

"Q. As computed by you, what was the profit for that year on the cylinder business?

"A. Expressed in a percentage, it was 14.55% on cylinder business and 7.46% on fan business.

991 "Q. In dollars and cents what was the difference between the figures submitted by Plaintiff's Exhibit 40 and those on the basis figured by you of the cylinder business?

"A. Exclusive of deductions, these are?

"Q. Yes, exclusive of deductions for interest and losses on agents' accounts.

"A. We show $6,932.40 less profit appertaining to the cylinder business than they do. We show $21,520, equivalent to 14.55%, as compared with $28,452.61, equivalent to 19.24% according to their figure.

"Q. For the year 1908 what was the profit on the entire business of the company reckoned in per cent?

"Mr. Zane: Per cent of what?

"Mr. Meads:

"Q. As figured on net sales, Mr. Seatree?

"A. 9.52% combined business.

"Q. What was the profit on cylinder business as figured by Marwick, Mitchell, Peat & Company in Plaintiff's Exhibit 40 for that period?

"A. After eliminating deductions for losses on agents' accounts it was 16.54%, and the relative per cent of the fan business was 2.02%.

"Q. For that same period what were the profits figured in percentages by you on the cylinder business?

"A. 11.76% for cylinder and 7.12 for fan.

"Q. Figured in dollars and cents what was the difference, if any, between the profit or loss on cylinder scales as figured by Marwick, Mitchell, Peat & Company in Plaintiff's Exhibit No. 40, and as figured by you?

"Mr. Zane: We object to his assumption that that is figured in Plaintiff's Exhibit 40. Plaintiff's Exhibit 40 contains no such figures as he is giving, but the question ought to be, after adding in allowances made by Marwick, Mitchell, Peat & Company for certain losses and so on.

"A. Before deducting Agents' losses.

(Question read.)

"The Master: Are such figures in Exhibit 40?

"Mr. Meads: Yes.

"Mr. Zane: No, they are not.

"The Master: Can you form your question so as to cover the objection?

"Mr. Meads: I want to answer the Master's question. Literally, no. In a particular year, for example, suppose the profits were $50,000. If Marwich, Mitchell, Peat & Company have said that in that

992 year the cylinder scales made a profit of $75,000, they do actually, although they don't expressly say that the fan scales have lost $25,000. If the whole profits which Marwick, Mitchell, Peat & Co pany use are only $50,000, they would naturally take off and make loss on fan scales. Now, I asked him the difference on the basis he has figured the profits on these cylinders and the loss or profit, if any, on the way they figured those in dollars and cents.

"Mr. Zane: Mr. Meads has missed the whole point. That's not the profits he asked figured by Marwick, Mitchell, Peat & Company, and the answer started to be made by Mr. Seatree shows it. He said that is the profit that would have been figured if Marwick, Mitchell, Peat & Company had not made deductions for losses.

"Mr. Meads: If they made $50.00 profit on an article less $5.00 which is charged off for an agent's loss and we put that back in to cover that point before we charge off the agent's loss they say in effect they made $55 up to that point.

"Mr. Zane: I am objecting to his question. His question is misleading.

"Mr. Meads: I don't think the witness misunderstands, and I don't think the court misunderstood it.

"The Master: I will take the answer.

(Question read.)

"A. The difference after adjusting the net figure reported by Marwick, Mitchell, Peat & Company to exclude the losses on agents' balances and a small charge for depreciation, which in neither set of figures is deducted—it is neither deducted up to this point in our figures, in the figures that Marwick, Mitchell, Peat & Company compute, or in the book figures, it is before making any deduction for losses on agents' accounts, the difference is $20,854.62 that they state the cylinder profits in excess of what we state them to be on a comparable basis, that is to say, before deducting any losses on agents' accounts.

"If I might be permitted, Mr. Master, I might explain this, that my object in preparing this thing this way was this, that agents' losses were a factor which were introduced by Marwick, Mitchell, Peat & Company and by us. They were not deducted on the books from year to year. They may have been charged off in lump at different times, but they were not deducted from year to year, and inasmuch as Marwick, Mitchell, Peat & Company and we computed those agents' losses slightly differently, to avoid confusion I
993 brought the figures forward before deducting any of those losses at all and then in the lower half of the sheet I proceeded to deduct our losses, but the figures on the top are all before deducting any allowances for agents' losses.

"Mr. Zane: Now, I would like to ask: Why are we not furnished with this paper which Mr. Meads has and the witness has?

"The Master: That's a matter over which the Master has no control.

"Mr. Zane: If he is examining from that, I think we are entitled to see it.

"Mr. Meads: Most of his testimony has not been on this paper. I may use this as a guide.

"The Master: Whether a copy of the minutes used by counsel in examining a witness should be submitted to the other side, I assume is a matter of courtesy between counsel and not a matter that the Master can control.

"Mr. Meads:

"Q. Mr. Seatree, what was the profit on the entire business of the Scale Company for the year 1909 figured in percentages?

"A. And exclusive of the profits on the Canadian business?

"Q. When I say business in each of these questions, I mean domestic business.

"A. 14.93.

"Q. And as computed by Marwick, Mitchell, Peat & Company what were the profits in that period on the cylinder business?

"Mr. Zane: We object to that question. There is no such computation by Marwick, Mitchell, Peat & Company in their account. We object to his showing the contents of a written document.

"Mr. Meads: Take out 'as computed by Marwick, Mitchell, Peat & Company' and say 'on the basis of Marwick, Mitchell, Peat & Company's report offered in evidence as Plaintiff's Exhibit 40.'

"A. On the basis of the profits reported by Marwick, Mitchell, Peat & Company, that is to say, after eliminating the allowance for agents' losses, the percentage of profit is 21.3 and the relative percentage on the residue treated as representing the fan scale profits 8.88.

"Q. As computed by you, what was the percentage of profit properly attributable to the cylinder scale business for this same period?

994 "A. 17.05 and the fan 12.93.

"Q. In dollars and cents what was the difference, if any, between the results obtained by following the methods adopted by you and those based on the report of Marwick, Mitchell, Peat & Company offered as Plaintiff's Exhibit 40?

"A. $23,633.13. They showed that amount greater cylinder profits than we do before deducting agents' losses.

"Q. What was the percentage of profit, if any, upon the total domestic business of the company for the year 1910?

"A. 9.46%.

"Q. What was that profit upon the cylinder business computed upon the basis of the account of Marwick, Mitchell, Peat & Company, offered in evidence as Plaintiff's Exhibit 40?

A. 17.96% with a relative loss on the fan scale business equivalent to 2.99%.

"Q. What in that same period was the profit attributable to the cylinder business as computed by you?

"A. 12.12%, and the profit on the fan scale business 5.57%.

"Q. Was there any difference in the figures which you obtained by following your method, and those which were obtained by following the plan adopted by Marwick, Mitchell, Peat & Company?

"A. A difference of $42,173.02. The profit on the cylinder scale business on the basis of their figures after eliminating losses on agents' accounts, and a small item for depreciation, would have been $129,816.85 as compared with our figure on the same basis of $87,643.83 as regards cylinder business, and as regards fan they would show a loss of $140,728.71, where we show a profit of $27,444.31.

"Q. Making a difference of?

"A. $42,173.02.

"Q. Mr. Seatree, before proceeding with this same line of testimony, is there any particular in which you wish to correct your testimony in any regard which you gave yesterday?

"A. Yes, I want to correct a slight, minor, clerical error that I found.

"Q. I don't understand.

"A. Yes, I want to correct a minor, clerical error.

"Q. What is that clerical error that you wish to correct?

"A. In the amount that I deducted for losses on agents' and customers' account in the calculation of three per cent for the year 1911 the figure should——

995 "Q. Give the figure as you did read it?

"A. The figure of deduction which I gave was $28,681.24 and it should have been $26,621.24.

"Q. What was the difference?

"A. $60.00. And in the line below there was a slight error which affected two figures. In stead of $17,753.35——

"Q. For what?

"A. The same thing. —it should be $17,706.70, and in the next column instead of $11,242.59 it should be $11,229.24.

"Mr. Zane: Now, you spoke of columns, what do you mean?

"A. Those figures appear under the column that I have been reading from on this manuscript, column of 'Losses on agents' and customers' accounts,' and correspondingly it affects, of course, the net figures shown for the net profits or losses in those two years.

"Mr. Meads:

"Q. Well, with those corrections amounting approximately to $60.00, what will be the net profits on cylinder scales for the year 1911?

"A. For the year 1911, instead of there being a loss of $19,218.83, there should be a loss of $19,158.31.

"Q. Yes.

"A. And in the next column, instead of there being a profit of $11,302.67, there should be a profit of $11,316.02.

"Q. That is not the next column, that would be the next figure?

"A. The next line.

"Q. That would be for 1912?

"A. Eight months in 1912.

"Q. And there would be a corresponding difference in the fan scale loss for the eight months, would there not?

"A. That instead of being——

"Mr. Zane: For what year is that?

"A. 1912. Instead of being $5,203.23, it should be $5,189.88.

"Q. And that difference amounts to what?

"A. In the last instance $13.35 and the total difference in the cylinder scales was $106.65, the two together making $120, $60.00 in each case.

"Q. There would also be a corresponding difference in the total net profits on the cylinder scale as you testified to it, would there not?

"A. Instead of being——

996 "Mr. Zane: This is 1912?

"Mr. Meads: No, this is the total profits on cylinder scales for the period which he read before.

"A. Of course, the additions will be changed with this difference of $13.00 and $60.00; the total instead of being $120,362.34 would be $120,468.89.

"Q. And the total profits on fan scales would be what?

"A. Instead of being $13,185.70, it would be $13,199.05.

"Q. Now, will you turn to your working sheet and state the total net profits on domestic business for the year 1911?

"A. In dollars and cents or expressed in a percentage?

"Q. First in money?

"A. The total profits for the year 1911 as shown by the books, before deducting interest, etc., was $41,110.98, equivalent to 3.51% of the total sales for that year.

"Q. What were the total net profits upon the cylinder scales for that same period to the same point upon the basis of the report of Marwick, Mitchell, Peat & Company known as Plaintiff's Exhibit 40?

"A. On the cylinder business it would be $120,117 even equivalent to 16.89%, of the cylinder scale sales.

"Q. And upon the last mentioned basis up to the same point, what were the profits or losses on the fan scales?

"A. The residue would have been a loss of $79,006.02 equivalent to 17.12% of the fan scale sales.

"Q. As computed by you in the manner which you have testified what was the profit for the period in question upon cylinder scales?

"A. $37,812.43 equivalent to 5.32% of the cylinder scale sales.

"Q. And what was the profit, if any, upon fan scales?

"A. $3,298.55, equivalent to approximately 7/10th- of one per cent.

"Q. What in dollars and cents was the difference to this point between the figures obtained by treating the business upon the basis of Marwick, Mitchell, Peat & Company's Exhibit 40 and the method adopted by you?

"A. They would have shown larger profits on the cylinder scale business than we did to the extent of $82,304.57.

"Q. Have you your working sheets before you for the eight months' period of 1912?

"A. Yes, I have.

"Q. What was the profit upon the whole domestic business
997 down to the point before charging off losses on agents' and customers' accounts and interest on investment for that period?

"A. $68,395.42, equivalent to 8.55% of the combined sales of new cylinder and fan scale business.

"Q. What was the profit upon cylinder business to this same point computed upon the basis of Plaintiff's Exhibit 40?

"A. $93,183.70, equivalent to 19.86% of the cylinder scale sales.

"Q. What was the profit or loss upon the fan scale business upon the basis of the report, Plaintiff's Exhibit 40?

"A. The residue would have been $24,788.28 loss equivalent to 7.53% of the fan scale sales.

"Q. As computed by you in the manner testified, what was the profit on the cylinder business to this point?

"A. $48,815.68, equivalent to 10.4% of the cylinder scale sales.

"Q. And what profit or loss, if any, on the fan scale business?

"A. A profit of $19,579.74, equivalent to 5.95% of the fan scale sales.

"Q. What was the difference, if any, in dollars and cents between the profits upon the cylinder business to this point and fixed on the basis of the report, Plaintiff's Exhibit 40, and the method adopted by you?

"A. On the basis of Plaintiff's Exhibit 40 the profits shown would have — $44,368.02 greater than we show them on the cylinder scale business.

"Q. Mr. Seatree, have you embraced in any form the totals of the figures which you have testified to showing the results?

"A. Yes, sir.

"Q. I show you an instrument. Is that such instrument?

"A. Yes, that's an exact copy of this.

"Q. When you say exact copy of this, you refer to your working sheets, do you?

"A. Yes, sir.

"Q. With the summaries?

"A. Yes, sir.

"Q. Which shows the profits or losses for this entire period on the basis you have testified to?

"A. Corrected in respect to that minor difference I spoke of.

998 "Q. Yes, corrected as to the minor difference to which you have this morning of $60.00.

"A. Yes, sir.

"Mr. Meads: If your Honor please, we offer in evidence the instrument identified by the witness, being the totals, the summaries as testified to by him, and ask that it be marked "Defendant's Exhibit 61." (Hands instrument to Mr. Zane who examines same with Mr. Seatree.)

"Better wait, Mr. Seatree, until a question is propounded.

"Mr. Zane: The witness has just stated that on this statement the phrase 'red figures denote losses' refers only to the red figures in amount and not to the red figures in percentages. You have stated that to me?

"The Witness: That's what I stated, yes.

"Mr. Zane: Your Honor, we will reserve our objection to this paper until we have cross-examined.

"The Master: All right.

"Mr. Meads: Then let it go in subject to objection, let the ruling be it goes in subject to objection. That's the safe way. I don't want to keep track of this as I did have to some other exhibits.

"The Master: Yes.

(Said instrument, so offered, received subject to objection and marked Defendant's Exhibit 61.)

"Mr. Zane: That's all with this witness at the present time. We will reserve our cross-examination until we get to Chicago.

"Mr. Meads: If this witness is to be cross-examined, we want him to be cross-examined where the books are at hand.

(Discussion.)

"The Master: The cross-examination of this witness may be postponed to a later period in the case.

"Mr. Zane: In Chicago, your Honor, can't it?

"The Master: Yes, the witness lives in Chicago, and we are all there.

999 ORVILLE CRAWFORD REEVES resumed the stand for further examination:

Direct examination (continued).

By Mr. Meads:

"Q. Mr. Reeves, were you in the employ of the Toledo Scale Company when the first electric scale was manufactured?

"A. I was.

"Q. And have been ever since?

"A. I have.

"Q. Do you know the different component parts that form the electrical attachment?

"A. I do.

"Q. There is now a scale before you, being a Defendant's Exhibit in this case.

"A. Yes.

"Q. Now, so the court may follow them, will you start at the outer end of the cord which is screwed into the electric light socket in this room by an appropriate plug and mark the parts which constitute such electrical apparatus?

"Mr. Zane: We object to this as irrelevant, immaterial and incompetent under any issue before the Master.

"The Master: Objection overruled.

"A. There would be a screw plug.

"Mr. Meads:

"Q. That's the first element?
"A. Yes.
"Q. Next in order what was there?
"A. Six feet of lamp cord.
"Q. Coming down to the lower end of the lamp cord what is the next element?
"A. A push plug and receptable.
"Q. That is this black plug and the receptable on top of the scale?
"A. Yes.
"Q. How is the pushplug and receptable connected with the switch at the base of the scale?
"A. It is connected by means of wiring known as No. 18 spider wire.

"Q. The spider wire is a small insulated wire running
1000 from this switch plug and receptable through the casing to the base of the scale, is that right?

"Mr. Zane: We object as leading.
"The Master: Objection sustained.

Mr. Meads:

"Q. The spider wire which you have mentioned connects with what?

"Mr. Zane: We object. He is asking a question—to describe the parts.
"Mr. Meads: He has got to the spider wire and I asked him what it connects with.
"The Master: Objection overruled.

"A. The spider wire extends from the receptacle through the lamps through the casing down to the housing and connects with the main switch.
"Q. Is there anything used in such spider wire to insure connections?
"A. The spider wire of course is insulated and it is bound together by tape.
"Q. How much tape?
"A. About two feet of tape.
"Q. Describe that tape?
"A. The tape is of an ordinary plastic tape used for regular electric purposes, used for the purpose of binding the wires together.
"Q. How wide is it?
"A. About half an inch wide.
"Q. What is the next element in the device in question?
"A. There would be four lamps with their sockets.
"Q. Where are those lamps?

"A. Those are inside mounted on a cast iron frame on the outside of the casing and above the reading line on the chart.

"Q. What is the next element in the device?

"A. Two ventilating caps for those lamps.

"Q. Just describe them so the court may know what the ventilating caps are?

"A. There are two lamps on the customer's side of the scale and two lamps in the merchant's side of the scale to illuminate the chart when a commodity is placed on the platform. In case a commodity is left on any length of time, these lamps would generate heat, and it is necessary to release that heat from the scale frame, consequently we cut out a slot permitting the heat to escape and
1001 over the slot we put a cap and those form what we call ventilating caps.

"Q. The ventilating caps are what material?

"A. Cast iron.

"Q. And about how long are they and how wide?

"A. They are about two inches wide and ten inches long.

"Q. What is the next element of the combination?

"A. There are four glass signs.

"Q. Describe where those signs are placed?

"A. One sign on the customer's side which illuminates when the lights are lighted, showing the word 'Toledo'—on the merchant's side; on the customer's side a similar sign at the top, the words 'Toledo No Springs Honest Weight,' some consist of 'No Springs' only or 'Honest Weight.'

"Q. Of what material are those signs made?

"A. They are glass.

"Q. What is the next element of the combination?

"A. The next elements I have are the cast iron frames to fasten the lamps to.

"Q. Well, describe what those cast iron frames are.

"A. These cast iron frames fit into the housing which surrounds the chart on which these electric lamps are fastened, they finally become a part of the casing surrounding the chart.

"Q. Of what material?

"A. Cast iron.

"Q. What is the next element, if any?

"A. The next element would be the electric switch.

"Q. Just describe what the electric switch is?

"A. The electric switch is a device mounted on the interior of the housing and contacting the pendulum of the scale so when the pendulum is raised the circuit is closed permitting the current to flow through, lighting the light.

"Q. What is the actuating portion of the switch which closes the circuit?

"A. The pendulum. No, the switch is operated when the pendulum—when a commodity is placed on the platform the pendulum raises.

"Q. But when the pendulum is released what is the power which closes the switch?

"A. The switch is provided with a lever which automatically closes, making the contact.

1002 "Q. What is it that moves that lever, Mr. Reeves, in the switch?

"A. An arm projected from the pendulum.

"Q. But when the arm releases the switch what is it that closes the switch?

"A. I don't understand the question.

"Q. When the pendulum arm is released as you are now releasing it on the scale, what is it that forces the switch into contact with the other end of the cylinder?

"A. The contact point is mounted on a spring which automatically closes.

"Q. About how long is this spring which forces the closing?

"A. About three inches long and one-quarter inch wide.

"Q. Are there any other elements in the device in question?

"A. The only other element I noted here is additional assembling cost.

"Q. I mean tangible parts?

"A. No, there are no other elements in the device different than the non-electric scale.

"Mr. Meads: Take the witness."

Cross-examination.

By Mr. Zane:

The description of the scale I have given is of the one here before the Master a recently made scale and not made during the accounting period.

Redirect examination.

By Mr. Meads:

The elements I have described were attached to the electric scale during the accounting period the only difference was stenciled signs. The electric device was the same and it was on fan scales as well as cylinders.

1003 WILLIAM L. FAHERTY, a witness for defendant:

Direct examination.

By Mr. Meads:

I live in Toledo; am the purchasing agent for the Toledo Scale Company, have been for eight years and I buy everything the Company uses. I was doing that in 1910. I was familiar with the costs to the company of various devices which it used and I am now, and have been continuously since the middle of the year 1910 until the present time. I purchased the various parts of the electrical equip-

ment used in the Toledo scales for the Company and I am familiar with such devices.

"Q. Look at the switch plug upon the cord attached to the Defendant's Exhibit of Electric Scale and state what that plug cost the company, if you know, in 1910?

"Mr. Zane: We object. There is better evidence of that fact.

"Mr. Meads: Not if it is within the actual knowledge of the man. The question is whether he knows.

"The Master: Objection overruled.

"Mr. Zane: Exception.

"A. I would say twelve cents.

"Mr. Meads:

"Q. Attached to such switch plug are six feet of electric light cord. What, if anything, did that cord cost per foot in 1910?

"A. A cent and a half a foot.

"Q. Attached to the end of the cord upon the scale itself is a receptacle and plug. What was the cost of the receptacle and plug?

"Mr. Zane: Do you mean to say they bought that or made it?

"Mr. Meads: They bought it.

"Mr. Zane: Same objection to this.

"The Master: Objection overruled.

"A. Thirty cents.

"Mr. Meads:

"Q. Assuming for the purpose of this examination that there is attached to such plug to connect such plug with the base of the scale twenty feet of No. 18 spider wire, what is that spider wire?

"A. What do you mean 'what is it'?

"Q. Just describe it?

"A. That's a technical name.

"Q. It is a small insulated wire?

1004 "A. It is a small insulated wire, yes.

"Q. What was the cost per foot of spider wire in 1910?

"A. Of course, when I give these prices, that would be about the average, you see, because prices fluctuate.

"Q. We will come to that later, Mr. Flaherty.

"A. Oh that I would say half a cent a foot.

"Q. In the connections with the switch plug assume that two feet of plastic tape have been used, what was the cost of that plastic tape?

"A. That would be very small. It would be, well, say one cent. It would be hardly nothing you might say—say one cent.

"Q. Assume that there are four electric lights in the scale in question, what was the cost of such four lamps per piece?

"Mr. Zane: In 1910?

"Mr. Meads: In 1910.

"A. Sixteen cents.
"Q. Sixty-four cents?
"A. Sixteen cents each.
"Q. Sixty-four cents for the four?
"A. Yes.
"Q. Assume there are four sockets in which such lamps are screwed, what were the cost of those four sockets in 1910? This is all in 1910.
"A. Five cents.
"Q. Each?
"A. Five cents each, yes.
"Q. Over each orifice are two metal plates known as ventilator caps. What was the cost of those caps in 1910?
"A. Ten cents each.
"Q. Upon the exhibit in question are four glass signs, one in front running across the scale with the word "Toledo" on it, what was the cost of that glass sign in front at the time mentioned?

"Mr. Zane: Same objection. This is no part of the scale.
"The Master: Objection overruled.

"A. Twelve cents.

"Mr. Meads:

"Q. A similar sign appears at the back of the scale. What was the cost of that?
"A. The same, twelve cents.
"Q. Below the long sign at the rear of the scale are two smaller signs, one at the left bearing the words 'No Springs' glass sign, what was the cost of that glass sign?
"A. Seven cents.
1005 "Q. At the right of the opening as you stand facing the rear of the scale is a sign 'Honest Weight' upon glass slightly larger than the other. What was the cost of that?
"A. Eight cents.
"Q. Holding the glass signs upon the scale in question are two metal castings. What was the cost of those?
"A. You mean the frames on the inside holding the electrical device?
"Q. Yes, the frames on the inside holding the electrical device?
"A. I would say twenty cents each.
"Q. Twenty cents on each scale, or twenty cents for each frame?
"A. No, sir, each frame.
"Q. Twenty cents for each frame?
"A. Yes.
"Q. Connected at the lower end of the spider wire is an electric switch. What was the cost of that switch?
"A. That's the castings and all the little parts?
"Q. Yes, the electrical switch?
"A. I would say fifty cents.
"Q. Fifty cents?

"A. Yes.

"Q. Since the year 1910 have those prices remained uniform?

"A. No, they vary all the time. They varied during 1910 I would say, they vary each year, they vary from month to month. Further than that you might on the same day get half a dozen quotations from the same party and they would all vary as much as ten or twenty-five per cent.

"Q. Would twenty-five per cent variation cover the variation since that time of the devices in question?

"A. The price today and what it was then?

"Q. Yes, or more specifically, up to August 31, 1912. That would be a period of approximately two years.

"A. Yes, that would more than cover.

"Q. It would not vary more than twenty-five per cent?

"A. No, it would not vary more than that.

"Mr. Meads: Take the witness."

1006 Cross-examination.

By Mr. Zane:

"Q. Have you got in your custody any bills of material for this electric light attachment in the year 1910?

"A. I would not have the bills.

"Q. Where would they be?

"A. They are passed to the treasurer for payment.

"Q. Well, they would be with the treasurer then?

"A. If he has them, I don't know whether he has them or not.

"Q. Did you look to see?

"A. No.

"—. You have not refreshed your recollection in any way by looking at bills?

"A. No.

"Q. So you are entirely relying upon your memory for the year 1910 and since?

"A. I didn't look at any bills.

"Q. Well, are you relying upon your memory?

"A. Why, I am giving this opinion simply from my experience in buying.

"Q. Are you relying upon your memory?

"A. As I say, these prices are given on my experience in buying.

"Q. Answer the question, are you relying upon your memory?

"Mr. Meads: I object to that question. Every man must of necessity rely upon his memory, if he says on memory alone, but I object to the question.

"The Master: Objection overruled.

"A. It is only a case of memory now, so far as that's concerned I have not given these from any notes.

"Mr. Zane:

"Q. Well, you are relying then upon your memory now as to what the prices were in 1910?

"Oh, answer. You can answer that without waiting so long.

"A. I can think now just a minute, can't I?

"Mr. Meads: Take your time.

"A. I would say that I have gone over this, I have looked up some prices on different things. I am using them every day because I am buying these every day.

"Q. You have looked up some prices in 1910?

"A. I am buying those same things.

"Q. Oh, you looked up present prices. That's not the ques-
1007 tion you are asked about. You are asked about what are you relying upon for the prices you gave in 1910?

"A. I know that's about what I paid for them in 1910, just like you would know if you bought anything in 1910.

"Q. Well, what do you rely upon for your knowledge, anything else than your memory?

"A. Based on the experience I have had in buying the things.

"Q. Are you relying upon anything else than your memory?

"A. Do you want me to produce, that is, if you want——

"Q. I want you to answer this question.

(Question read.)

"A. 'Are you relying upon anything else except memory'—well, it is absolutely memory, because I have no notes in front of me.

"Q. Now, answer the question, what are you relying upon for your statement as to prices in 1910?

"A. Well, I have no notes in front of me, it is memory.

"Q. Answer the question.

"A. Do I misunderstand that question?

"Mr. Meads: No, answer it again if he wants it, Mr. Flaherty.

"Mr. Zane: We are waiting.

"A. As I say, I have absolutely no notes. I am relying on my memory.

"Mr. Zane:

"Q. Answer the question.

"A. That's the question if I understand it.

"The Master: He says he is relying on his memory, he has no notes.

"Mr. Zane: But he might have notes somewhere else than here.

"Mr. Meads: If he did, he would be relying on his memory if he didn't have the notes before him.

"Mr. Zane:

"Q. Have you looked at any bills of material and the prices thereon in the year 1910 in order to prepare you to testify here?

"A. No, sir.
"Q. Have you looked at any books or any papers at all in regard to the prices in 1910 to qualify you to testify here as to prices in 1910?
"A. Why, I am always looking at books and comparing prices. That's my business. I do it every day.
1008 "Q. Now, what books did you look at as to prices in 1910 that you have testified to here?
"A. By books do you mean journals?
"Q. Books or papers or anything of that kind?
"A. Yes, I have looked at some.
"Q. When did you look?
"A. I am buying those right along so consequently I am looking every day.
"Q. Oh, that's present prices. I asked you about prices in 1910?
"A. Yes, I looked at prices.
"Q. What books or papers did you look at for prices in 1910 in order to qualify you to testify here?
"A. I have looked at records personally.
"Q. What are those records?
"A. They are cards.
"Q. Cards?
"A. Card records.
"Q. Card records?
"A. Yes.
"Q. Where are they?
"A. In my department.
"Q. Can you produce those cards for 1910?
"A. I think I can.
"Q. For these prices that you have testified to here?
"A. I think I can.
"Q. Well, let us see what those cards are. Please produce those?
"A. All right, it will take me some little time to get them.
"Q. How long?
"A. Well, I don't know. It just depends.
"Q. Well, you know where they are, don't you.
"A. I know where they should be.
"Q. Well, you don't infer anybody has taken them away from you?
"A. No, but you know cards may get lost. You can't tell.
"Q. Look and see what you have. You say you looked at some. Now, let us see what they were.
"A. All right.
"Q. And before doing that tell me when you looked in order to qualify you to testify here, when was it?
"A. As I say, I am looking at those cards every day.
"Q. Well, when was it you looked at records in 1910 to
1009 qualify you to testify here as to prices in 1910, when was it you did that?
"A. Why, it is in the last few days.

"Q. In the last few days? Very well then, you know what you looked at, and produce what it was you looked at.
"A. Do you want me to get them for you?
"Q. Yes?
"A. All right.
(Witness leaves room and later returns with several cards.)
"Q. Now, you have produced cards, Mr. Flaherty?
"A. Yes, sir.
"Q. Do those cards show the cost of different parts of this electric light attachment?
"A. Yes.
"Q. Show me one of them please.
"A. Here's one right there. (Producing card.)
"Q. This is lamp cord, is it?
"A. Yes.
"Q. This card that you have produced?
"A. Yes.
"Q. And you bought that lamp cord from F. Bissell Company?
"A. Yes.
"Q. And your first item is twenty feet?
"A. Now, if you are referring to the lamp cord that's used in this case, I don't think that's it, the first entry, no, I know it is not.
"Q. That is not what is used in this scale. Show me an entry used in this scale?
"A. Here is one right here. (Indicating another entry on same card.)
"Q. You have shown me an item that I have checked Now, what is the date of that?
"A. October 10, 1910.
"Q. That is 815 feet?
"A. Yes.
"Q. At $52.80 a thousand?
"A. Yes.
"Q. With a discount of how much?
"A. 62½% and 25%.
"Q. Well, what was the discount of 62½% for?
"A. It is a regular trade discount.
"Q. That's the regular trade discount?
"A. Yes.
1010 "Q. But discount if paid when?
"A. It is a cash discount, it is a trade discount.
"Q. That's a regular trade discount of 62½%?
"A. Yes.
"Q. And then what is the 25% discount?
"A. The same thing, it is a trade discount.
"Q. Trade discount.
"A. Yes.
"Q. But how do you get the discount?
"A. How do you mean?
"Mr. Meads: How do you figure it?

"Mr. Zane:

"Q. How do you obtain it? Oh, the discount is on the list?
"A. Yes.
"Q. Appears on the list?
"A. Yes.
"Q. They make a high price, but sell it to you on this discount of 62½% and 25%?
"A. Yes, sir.
"Q. What is this item here of 300 feet at $25.30 per thousand?
"A. That's a new, 18 new cord. One is old cord and the other is new cord.
"Q. What kind of lamp cord was it, lamp cord used in this electrical attachment?
"A. That may have been used in it, I could not say.
"Q. $25.30 a thousand?
"A. Yes, less 50 and 10.
"Q. Less discounts of 50% and 10%.
"A. Yes.
"Q. Now, will you show me something else besides lamp cords?
"A. There is one right there, Benjamin attachment plug No. 903, Benjamin attachment plug.
"Q. That's used in this electric light attachment?
"A. Yes.
"Q. 300 of them at 25 cents each?
"A. Yes.
"Q. With a discount of 50 and 10?
"A. 50 and 10, yes.
"Q. And what is the date of that?
"A. August 7, 1911.
"Q. This is in the year 1911?
"A. Yes.
1011 "Q. August 7th?
"A. Yes.
"Q. Now, are there any other items on this card you have shown me that go into the electric light attachment? I mean on this card I am showing you which card refers to plugs?
"A. Well, you see there are three different items there one after the other.
"Q. Yes, there are four, are there not, four different 300 lots?
"A. Yes, sir, five.
"Q. Five?
"A. Yes.
"Q. And the price in each case is 25 cents each with a 50% and 10% discount?
"A. That's right.
"Q. Now, show me an item or card referring to some other item in this electric light attachment?
"A. Well, here is one here. (Producing another card) Bryant socket, that's a small socket.
"Q. You have shown me a card referring to sockets. Now, what

kind of sockets are those that are on this card that are used in the electric light attachment.

"A. Well, there is a Bryant No. 125 volt, one-half ampere.

"A. And is that all?

"A. That's the particular socket we are speaking of, the small candelabra socket.

"Q. Yes. Those are twelve cents each?

"A. Twelve cents each.

"Q. With a discount of 45%?

"A. 45 and 10.

"Q. 45 and 10?

"A. Yes.

"Q. Trade discount?

"A. Trade discount, yes. There is another socket. Here it is here. This is the socket that's used instead of this particular socket up there, I think it is.

"Q. Another socket at twelve cents each?

"A. No, at 50 cents each.

"Q. Oh, at 50 cents each.

"A. 50 cents each less 50 and 10.

"Q. Less discount of 50 and 10%?

"A. That's instead of that 30 cent one, instead of the plug and receptacle.

1012 "Q. What was the date of that?

"A. August 23, 1910.

"Q. Now, you have produced a card in regard to wire?

"A. That's spider wire.

"Q. Spider wire?

"A. Yes, sir. There is an item here, $11.10 per thousand less 60%.

"Q. Per thousand feet, at $1.10 per thousand less trade discount of 60%?

"A. Yes.

"Q. Now, what was the date of that?

"A. That's April 25, 1912.

"Q. 1912?

"A. Yes. That's the friction tape. (Referring to another card.)

"Q. Now, this friction tape?

"A. That's 30 cents a pound.

"Q. And what is the date, 1910 sometime, is it not?

"A. August 5, 1910.

"Q. And do you know how much to the pound, how many feet to the pound?

"A. No, I don't.

"Q. Well then, how did you arrive at how much it was?

"A. Well, I said it was almost less than anything, a cent.

"Mr. Meads: He stated it a cent as being the only amount——

"Mr. Zane:

"Q. It is almost less than nothing and you put it at a cent a foot?

"Mr. Meads: No, a cent in a scale.

"Mr. Zane:

"Q. Just one cent in each scale?
"A. Yes.

"Mr. Meads: Two feet length.

"Mr. Zane:

"Q. How about the signs, where are the signs?
"A. We didn't buy signs at that time.
"Q. Not back there in 1910?
"A. No, but I gave you the price in 1916 and glass and everything is up, oh, possibly twenty-five or thirty per cent.
"Q. Where did you get your signs in 1910?
"A. Why, as I remember, I think they were made here in the factory, if I remember right.
"Q. And this card you have produced is for signs at eight cents each?
1013 "A. Yes.
"Q. In the year 1910?
"A. No.
"Q. Or 1916?
"A. Yes.
"Q. And you have produced another for signs at seven cents each in the year 1916?
"A. Yes.
"Q. And 1917?
"A. Yes.
"Q. And you have produced another card for signs — ten cents each in 1916 and 1817?
"A. Yes, and I would say they would have been much cheaper in 1910.
"Q. Yes, much cheaper in 1910?
"A. Yes.
"Q. Now, this article 'lamps', what lamps on that card that you have produced are used in this electric light attachment?
"A. This item right here.
"Q. 500 lamps at 28 cents each. At what discount?
"A. Less 15, 10 and 10.
"Q. What do you mean by that?
"A. That's a trade discount.
"Q. Trade discount of 15%, 10% and 10%?
"A. Yes.
"Q. Is that right?
"A. That's right.
"Q. Now, what is the date of that card?
"A. December 27, 1910.
"Q. Now, in 1910 did you buy or make the switch plugs?

"Mr. Meads: He has already testified he bought them.

"Mr. Zane:

"Q. Just answer the question.
"A. What switch plug is that?
"Q. Your switch plug used in this electric light attachment?
"A. I bought these plugs up here. (Indicating plug at end of cord.)
"Q. Well, are there any switch plugs in the electric light attachment?
"A. There is a special plug and receptacle there.
"Q. Yes.
"A. Yes.

"Q. But that is not the switch plug you talked about?
1014 "A. I don't know anything about a switch plug.
"Q. In your direct examination you gave the price of a switch plug at twelve cents, what did you refer to?
"A. That was this attachment plug.
"Q. That's the attachment plug?
"A. Yes.
"Q. Where it begins, where it is connected with the electric light plant?
"A. Yes.
"Q. Now, the receptacle and plug which you gave at a cost of 30 cents in 1910?
"A. That's the one on the scale now.
"Q. Well, was it on there in 1910?
"A. I don't know until I investigate it, no.
"Q. And you think you made those?
"A. No, we bought them. That's the one I showed you here. This is the one I showed you here, this one, this wall socket.
"Q. Yes, 50 of them at 50 cents each.
"A. Less 50 and 10.
"Q. Less, 50 and 10%, that's what you gave as 30 cents in cost?
"A. Yes.
"Q. Now, have you produced a card referring to the spider wire?
"A. Yes, that's this one.
"Q. And that's the 2,000 feet?
"A. At $11.10 per thousand less 60%.
"Q. Less 60%?
"A. Yes.
"Q. That you purchased in 1910?
"A. Yes.
"Q. The electric tape you have already spoken of?
"A. Yes.
"Q. Now, the four sockets that you spoke of, they are the sockets for fitting in the electric lamps, are they?
"A. Yes.
"Q. In 1910 what do you find the price for them to be on your card?
"A. I just gave it to you a moment ago.

"Mr. Meads: Those Bryant sockets.

"A. (continued). 12 cents each less 45 and 10.

"Mr. Zane:

"Q. Now, over each orifice you spoke of two metal plates. Did you make those?

1015 "A. That's the ventilating caps. We bought the castings and drilled the holes and sprayed them here.

"Q. Bought the cas-ings and drilled the holes?

"A. Yes.

"Q. And by spraying them, what do you mean by that?

"A. Put the gold finish on.

"Q. Now, do you know what the castings cost you?

"A. The castings would run about eight cents a pound.

"Q. How many in a pound?

"A. Well, they weighed about a half a pound a piece I should say.

"Q. Now, the glass signs you have already spoken of. This twelve cent glass sign, but you say you made those back in 1910.

"A. I gave you the glass sign, ten cents it was.

"Q. Yes, but you made them back in 1910?

"A. I think we did.

"Q. Well, you don't know the cost then from any purchase, do you?

"A. No, but judging from the price now I would say they would have cost more than that, possibly twenty-five per cent more any way.

"Q. Well, you have not informed yourself in regard to the cost otherwise than on these cards?

"A. Just judging from the market, that's all.

"Q. Now, the two metal castings holding the glass signs, did you make those?

"A. We buy the castings and drill the holes in them.

"Q. What do the castings cost you a pound?

"A. I would say about four cents.

"Q. And how many of them to the pound?

"A. They weigh, I should say about three pounds a piece.

"Q. Now, the electrical switch, do you buy that?

"A. We buy the castings and the material that goes in it.

"Q. And you make the switch yourself?

"A. Yes.

"Q. You said the price of the electrical switch was 50 cents. How do you make that up?

"A. Just simply as an estimate.

"Q. Yes, but what were the items of your estimate?

"A. Well, there are two platinum points that would cost about eight cents each.

"Q. Yes.

1016 "A. Then there are a lot of various items in it. I imagine there are 22 or 23 parts in it, and I roughly estimated those at, oh between a cent and a cent and a half a piece.

"Q. You made those?

"A. Yes.

"Q. And so the cost of them is not taken from any of these cost sheets?

"A. No.

"Q. Or these card indexes for bills of material I mean?

"A. Yes.

"Q. What's the answer?

"A. No, they are not taken from there.

"Mr. Zane: I think that's all.

"Mr. Meads: That's all, Mr. Flaherty."

GEORGE H. MOULD, a witness on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am the foreman of the assembling room in the factory of the Toledo Scale Company, and I held this position in the year 1910. I had charge of the installation of the electrical equipment into the Toledo Scales. The electrical equipment in this scale before me—Defendant's Exhibit No. 55—was assembled under my charge.

"This work of assembling the electrical attachments on such scales is done by piece-work, and the cost of such installation is now 24c per scale. It is lower now than it was in 1910 by 3½c. In other words, the cost for assembling the electrical equipment into the electrical scales in the year 1910 was 27½c per scale.

"We have continued installing the electrical device on cylinder scales and this price of 27½c remained until 1912. It has now been reduced to 24c."

1017 WILLIAM A. ZOLG, a witness on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I have examined the exhibit of the plaintiff, No. 40, and note at the bottom of one of the pages a statement of the type number of scales sold in 1910. One of the style numbers used is No. 383, which is the type or style number for one of our electric cylinder scales. There are 174 scales of this type listed as sold in that year. There are also listed as sold in 1910, 68 scales of the type No. 384, and 5 scales of type No. 387. These types are also electric scales.

"In 1911 there were listed as sold, 1,158 scales of the 383 type; 267 of the 384 type; 32 of the 387 type; 52 of the 583 type; and 3 of the 587 type. All of these types were electric cylinder scales sold during the year 1911.

"During the eight months' period ending August 31, 1912, there are listed as sold, 898 scales of the 383 type; 132 of the 384 type; 38 of the 387 type; 157 of the 583 type, and 4 of the 587 type. All of these scales were cylinder scales sold during the 1912 period. There is also one scale of the 388 type. I don't remember now whether this was an electric scale or not.

"The total of these separate amounts, listed by plaintiff, is 2,987.

"I have now investigated, and find that the 388 type of scale was also an electric scale—the same as the 387 but with a high saddle—and as there was one of these scales sold in the 1912 period, it should be added to the 2,987 listed, giving a total of 2,988 electric scales sold during the accounting period.

WHITTEN M. RANDOLPH, a witness called on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am 32 years of age and live in Toledo. I am Auditor of the Toledo Scale Company, and have been for the last two years. For four years before that I was Cashier for this Company, and
1018 was bookkeeper for the National Cash Register Company for about eight and a half years before that.

"I have made an investigation to ascertain the number of gold finished scales shipped by the Toledo Scale Company between the 1st of January, 1906, and the 31st of August, 1912. I have made up a list of such scales in my own handwriting, which I here produce. I can give the style numbers as well as the number of scales sold of each style. This list was compiled from the shipping records. I will list these scales by styles and mark beside each style the number of scales shipped of that style.

Style 82	2	Style 181	5	Style 182 ...	18
Style 183	8	Style 184	1	Style 185 ...	6
Style 300	3	Style 344	6	Style 345 ...	939
Style 346	1,506	Style 347	251	Style 348 ...	72
Style 349	7	Style 350	3	Style 353 ...	71
Style 381	1,705	Style 382	405	Style 383 ...	2,629
Style 384	533	Style 385	147	Style 386 ...	6
Style 387	115	Style 581	5		

This makes a total of 8,445 gold finish scales shipped in the accounting period.

"I have also made a list of style numbers of scales shipped of all styles of finish other than gold. This list is as follows:

No. 81	234	No. 82	425	No. 83	76
No. 84	17	No. 85	20	No. 86	6
No. 87	1	No. 181	88	No. 182	225
No. 183	60	No. 184	1	No. 185	12
No. 186	5	No. 300	418	No. 344	743
No. 345	3,188	No. 346	4,012	No. 347	1,388
No. 348	213	No. 349	37	No. 350	43
No. 351	1	No. 352	2	No. 353	205
No. 381	1,132	No. 382	386	No. 383	324
No. 384	65	No. 385	85	No. 386	4
No. 387	15	No. 388	1	No. 581	1,028
No. 583	283	No. 585	87	No. 587	10

"This makes a total of 14,840 scales other than gold finish, which, added to the 8,445 gold finish scales, makes a total of 23,285 scales shown to have been shipped, according to our shipping records.

"In the Account Furnished by Defendant, there are shown 1,839 cylinder scales on hand at the end of the accounting period.
1019 This amount deducted from the total number of scales shipped—23,285—leaves a total number of 21,446 scales.

"In the account prepared by the plaintiff, Plaintiff's Exhibit 40, the number of cylinder scales shown as actually sold during the period is shown as total net sales for the various years covered by the report. They are as follows:

1906	period	55
1907	"	1,159
1908	"	3,052
1909	"	3,929
1910	"	5,060
1911	"	4,675
1912	"	2,894

making a total of 20,824, listed as sold, as compared with our total of 23,285 or against our total of 21,466 with scales on hand deducted. The difference between the 21,446 scales, the difference between scales shipped and the figures in the plaintiff's account is 622 scales. The only explanation I have for this discrepancy is that these scales must have been shipped and returned to the factory and then dismantled. I know that every month scales are being returned and are to*nr* down and not afterwards resold.

Cross-examination.

By Mr. Zane:

"Q. Now, in giving the gold scales shipped from January 1, 1906, to August 31, 1912, you collected the scales in each type together for the whole period, did you?

"A. Yes, sir.
"Q. Did you find it by years?
"A. No, sir.
"Q. Who told you to avoid finding it by years?
"A. No one.
"Q. Well, you had to go over the shipping records for each year, didn't you?
"A. Yes, sir.
"Q. And you could have put down the number in each year, could you not?
"A. It would have been possible yes, but I was not asked for that.
"Q. Let me see what you did make up.
1020 "A. (Witness hands paper from which he has been testifying to Mr. Zane.)
"Q. Where is the material from which this was made up?

"Mr. Zane: Get your working papers.

"A. The working papers?

"Mr. Zane:

"Q. Wait just a minute. Did you make up the list yourself?
"A. Not all of it. Part of it was made by men personally under my supervision.
"Q. And how much was made up by somebody else?
"A. Well, there was quite a number of clerks working under my supervision making this up.
"Q. How many were working under you?
"A. I believe about twenty.
"Q. So that this represents the work of twenty clerks.
"A. Yes, sir.
"Q. Did you give a particular year to different clerks?
"A. No, sir.
"Q. And what you have testified to is from the work of these clerks?
"A. And my own work.
"Q. Well, how much of your own work?
"A. I spent the same time on that they did.
"Q. Well, you did one-twentieth of the work then?
"A. I would say more than that because I did more than they did on the average.
"Q. How much of the work did you do?
"A. I say I did more, about one-tenth of it probably.

"Mr. Meads: Do you want those working papers?
"Mr. Zane: Not just yet.

"Q. Now you made out the total shipped at 23,285?
"A. Yes, sir.
"Q. Now, if you add to that the scales here in the factory on hand August 31, 1912, you would have the total shipments and the total on hand?

"A. No, sir, you would not.

"Q. Why not?

"A. You would have to add the shipments. The shipping records show the scales that were finished as well as those that were shipped.

"Q. In this 23,288 have you included scales on hand in the factory on August 31, 1912?

"A. No, sir.

"Q. No. Now, how many were there of those?

1021 "A. I can't say.

"Q. Can you give us any judgment?

"A. No, sir.

"Q. Have you any record downstairs that would show the number of scales here in the factory not shipped August 31, 1912?

"A. There is none that I know of.

"Q. Did you have on August 31st or soon thereafter reports from agents in the field showing how many scales they had on hand and have you any such reports?

"A. Just probably reports from some of them, but they would not be complete.

"Q. Those would not be complete?

"A. No.

"Q. Now, you were handed Mr. Zolg's collection of scales on hand as 1,839 scales?

"A. Yes, sir.

"Q. You don't know whether those were simply the scales out to agents or whether that includes scales on hand in the factory, do you?

"A. No, I do not.

"Q. So you do not mean to say that the 1,839 scales were all shipped out of the factory?

"A. I could not be positive of that.

"Q. No, and you do not mean to say that you are swearing here that that 1,839 ought to be deducted from 23,285 to give you the scales shipped, are you?

"A. Scales sold I presume you mean.

"A. Scales shipped.

"A. My records show 23,285 shipped.

"Q. Yes. Then you deduct 1,839 scales?

"A. Yes, sir.

"Q. Now, I say since you have already testified that you don't know whether or not those 1,839 scales included scales in the factory, you don't mean to say that that 1,839 scales ought to be deducted in order to show the number of scales that had been produced at the factory in that time, do you?

"A. If part of them were on hand in the factory, then that part should not be deducted.

"Q. You have not meant to testify here to any number of scales sold, have you?

"A. No, sir.

"Q. Not in any particular?

1022 "A. No, sir.

"Q. You are not *not* able to say whether during this time 20,824 cylinder scales were sold or not, are you?

"A. No, sir.

"Q. You are not able to say whether during this period 20,824 scales had been sold and there were on hand a larger number of scales unsold that 1,839 cylinder scales, you are not able to say that either, are you?

"A. I have only taken 1,839 from the record.

"Q. What record?

"A. From Mr. Zolg's testimony.

"Q. That's what you call a record, what Mr. Zolg got up?

"A. Yes.

"Mr. Zane: That's all.

Redirect examination.

By Mr. Meads:

"Q. Mr. Randolph, what is the total amount of scales sold according to Marwick, Mitchell's report?

"A. 20,824.

"Q. What is the total amount of cylinder scales shipped during that period?

"A. 23,285.

"Q. Will you please state the amount obtained by taking such proportion of the gold scales shipped according to your shipping records as the total number of cylinder scales sold bears to the total amount of cylinder scales shipped?

"A. (Witness makes calculation.)

"Q. What figure have you taken to determine the fraction?

"A. I took the figure 20,824.

"Q. Which represents what?

"A. Represents the scales sold per Marwick, Mitchell's report.

"Q. Yes.

"A. Over the figure 23,285 which represents the number of cylinder scales shipped per our shipping records and that fraction of the gold scales shipped which is 1,845 on the 7,574.

"Q. 7,574.

"A. Yes.

"Mr. Zane: You took the difference between 23,285 and 20,824?

"A. No, sir.

1023 "Mr. Zane: What did you do?

"A. I took the fraction 20,824 over the figure 23,285.

"Mr. Zane: Well, what did you get?

"A. That's the fraction. I took that part of 1,845.

"Mr. Zane: Let me see your calculation.

"A. (Witness hands calculation to Mr. Zane.)

"Mr. Zane: Your calculation is wrong, is it not?

"A. It is slightly in error.
"Mr. Meads: If it is wrong, correct it, Mr. Randolph.

"A. There is a slight error made in the division there. The correct figure is 7,552.
"Q. Instead of 7,574?
"A. Yes, sir.
"Q. A difference of 22 scales."

Mr. Zane: We move to strike out this testimony as to the number of gold scales on the ground that it is irrelevant and immaterial and has no bearing upon any issue before the master.
The Master: That's this last question?
Mr. Zane: No, the testimony as to the number of gold scales, how many of these scales had a gold finish.
Mr. Meads: You remember Mr. Theobald stated for exactly the same scale they got ten dollars extra for the gold finish.
Mr. Zane: That has no bearing upon what I am talking about, that is, on any view of the evidence they can't say that they are allowed profit.

(Discussion.)

The Master: Well, the evidence may stand.

GEORGE F. KELLERMAN, a witness produced on behalf of the defendant, testified as follows:

"I live in Toledo and am the foreman of the Enameling Department of the Toledo Scale Company and have been since the 17th day of November, 1906.

Q. How is the enamel put upon the scales of the Toledo Scale Company?

Mr. Zane: Objected to as irrelevant and immaterial and incompetent under any issue.
1024 The Master: I don't see the materiality of this class of testimony.

(Discussion.)

The Master: I think you are in the realm of speculation. However, Mr. Meads, if you think that's competent, I will take the testimony subject to the objection.

(Question read.)

A. It is applied with the De Vilbiss air brush.

Mr. Meads:

Q. Was the enamel in the blue finished scales put on with an air brush?
A. Yes, sir.

Q. Was the enamel in the gold finished scales put on with an air brush?
A. Yes, sir.
Q. By the same men?
A. Yes, sir, the same workmen.
Q. By the same machine?
A. Yes, sir.

"To cover one hundred scales with blue finish enamel requires twenty-one gallons of such enamel—while to cover one hundred scales with the gold finish enamel requires twenty-nine gallons of such enamel. That has been true during the last seven or eight years.

"The time involved in spraying a gold finished scale with the De Vilbiss air brush is the same as that required for spraying with the blue finish.

Cross-examination.

By Mr. Zane:

"We began using the air brush about 1907. That is the only way we have of applying the color to scales.

Redirect examination.

By Mr. Meads:

"We began using the air brush in 1907 and before that time we applied the enamels to scales with a brush. With a brush it takes longer to apply the gold than the blue, since each piece has to be handled twice when we put on the gold finish and it has only to be handled once when we put on the blue. I don't remember just when in 1907 we commenced spraying with the air brush but it was about a year after I came.

1025 WILLIAM L. FLAHERTY, recalled as a witness for the defendant, testified as follows:

"I purchased the enamel for the enameling of the various scales of our Company since I have been the Purchasing Agent. I know the cost per gallon of the blue enamel used in 1910. We bought it then at from $1.75 to $2.00 a gallon.

"The cost of the gold enamel per gallon cannot be so closely figured because there were three different materials that entered into that. The first was what we called the marbleizing lacquer—which cost at that time $2.50 per gallon, less 5% discount. The next ingredient was a thinner for which we paid $150 a gallon, less 5% discount. The third ingredient was a bronze powder which cost 65c a pound. To make up a gallon of the gold enamel they used a pound of the bronze powder and mixed it with two-thirds marbleizing lacquer and one-third of the thinner. Figuring in round numbers, there would be in each gallon about 47c. worth of the thinner

and $1.88 worth of the marbelizing lacquer, which with bronze powder at 65c. a pound gives us a cost of $2.70 for a gallon of the gold enamel. This was the cost in 1910 and there would be very little difference between this price and the price that prevailed up to August 31st, 1912. There wouldn't be an increase of more than 10%. The price prior to 1910 I cannot accurately tell you as that was before my time as Purchasing Agent, but I would not think there would be very much difference because I know there has not been very much difference in any of these materials except during the present war times. The prices since 1912 are of course much highr than they were in 1910. I do not believe however that the prices in 1910 were much higher or lower than in the years prior to that.

1026 GEORGE R. FRYE, a witness recalled on behalf of the defendant, testified as follows:

Direct examination.

By Mr. Hibben:

"I am thirty years of age and reside at Toledo, Ohio. I am a patent attorney by profession and have had charge of the Patent Department of the Toledo Scale Company since the fall of 1914.

"In this position I am the resident patent attorney. All inventions that are made by our inventors are submitted to me for inspection, and, if thought patentable, I file the applications for patents on them and conduct all proceedings in the Patent Office. Similarly, if patents are submitted to us for purchase I have to make a thorough examination of the patent, and especially of its claims, and report upon it both to our Invention Committee and at times to our Chicago patent attorneys. In addition to this I handle certain of the detail work attendant to litigations that have been begun since I have been here, and also some of those that was started before I came. There are other details, such as are incident to the conducting of the affairs of a Patent Department, but generally I have to examine and pass upon inventions or patents connected with the Company.

"During the course of my work for the Toledo Company I have been called upon to examine many patents, both as to the disclosure thereof and the character and scope of the inventions involved. In the course of that work I have had occasion to compare those patents with machines or devices and to determine whether such machines or devices contain the invention described and claimed by the patent.

"My education and experience in regard to mechanical subjects and more particularly to patent matters in general is substantially as follows:—After graduating from Georgetown University in 1906, where I had taken a special course in mechanics, physics, chemistry and mathematics I entered the employ of the patent attorney firm of Shepherd & Parker, being detailed at Washington. After about a year and a half with them I entered the employ of Bacon & Milans,

another Washington patent attorney firm who did extensive
1027 associate work for out-of-town firms. I was with them nearly two years and then was associated with Charles A. Stockman, a Washington patent attorney. I had now been engaged in the patent attorney work for about four years, and believing it would be beneficial in order to round out my knowledge of patent work to serve on the inside of the Patent Office I took the examination for Patent Examiner, and was appointed to the Patent Office, as Examiner, in July, 1910. I remained in the Patent Office until I came here in 1914. As Patent Office Examiner, I would have to read up a new application as filed in the Office, paying particular attention to the claims; then compare the invention and the claimed disclosure with the prior art—what had been patented previously. In doing this I would have to make a search through the prior patents of the United States and foreign countries, and if I found any that met the terms of any claim I would, as we call it, reject such claim. If, however, I was unable to find prior patents which completely met the terms of the claim, I allowed such claim. I had to pass upon the merits of the claims and disclosures and submitted in the pending patent applications. It is hard to determine how many patent applications I examined while inside the office. Some weeks I averaged fifteen to twenty cases, and I was in the Office for 4½ years.

"I have heard the evidence and seen the Exhibits offered in this case and I understand the construction and mode of operation of the cylinder scales manufactured and sold by the Toledo Company during the accounting period.

"I have examined Defendant's Exhibit No. 37, being the De Vilbiss patent #839,736, issued December 25, 1906, and am familiar with that patent and understand the construction and the invention disclosed and patented therein. I can state briefly the construction and invention disclosed in this patent.

Then follows:

Mr. Zane: We object to this, your Honor, as irrelevant and immaterial. Here is a patent issued December 25, 1906, with a cylinder in it. Now, so far as the two parties to this case are concerned, the record and the decision of the Circuit Court of Appeals has established that their scale is an infringement of ours. Now, it
1028 is perfectly immaterial what patent they got or had. Our patent has been upheld and their scale has been held to be an infringement.

Mr. Hibben: If the Master please, we propose to show that this patent which has been issued to the defendant is this case discloses a construction which is embodied in the scale in question, the scale which we are called upon to account for. The purpose of the present examination is to show that the invention of this patent is embodied in those scales, the present question asks for a brief statement as to what the nature of the invention is. The next, of course, will be whether that invention is embodied in those scales. It is a matter of expert opinion on this subject and it is just as competent and

material on this accounting here as it would be in the main case, but on another branch of the case, it is opinion evidence and is not incompetent for that reason.

The Master: I will reserve my ruling on this question until counsel has had an opportunity to present arguments.

Mr. Hibben: If the Master please, until I have had an opportunity to submit authorities and the question is ruled on, I will withdraw the witness.

(Here followed the motion hereinbefore inserted at the end of the testimony of Henry Theobald.)

WILLIAM ERNEST SEATREE resumed the stand for further examination:

Cross-examination.

By Mr. Zane:

"The total cylinder sales for the year 1907 amounting to $154,758.00 was obtained from Plaintiff's Exhibit No. 40. The figure representing gross sales of fan scales, $456,924.30, obtained by deducting both cylinder sales and second-hand sales from gross sales, was obtained from the second page of Plaintiff's Exhibit No. 13. On that page are shown the gross sales $616,164.80, and underneath is new scales sold, $61,314.80, and second-hand scales sold, $850, totaling $616,164.80. From the same exhibit I obtained the total profit for Canadian sales which I deducted, $3,632.50, mak-
1029 ing the new scales sold $611,682.30, which are both scales sold in the United States and in foreign countries, except Canada, as I understand it. The deduction covering charge backs of cylinder scales, $6,922.00, was taken from Plaintiff's Exhibit No. 40. The total charge backs, $43,003.46, were taken from Plaintiff's Exhibit No. 13. The fan charge backs of $36,081.46 were found by deducting the $6,922 applicable to cylinder scales from the total charges backs, $43,003.46. The deduction for Exchange Scales Allowances, $24,737.50, was obtained from page 2 of Plaintiff's Exhibit No. 13. This is an undivided figure, and is the only figure for exchange scale allowances. I divided this allowance account of $24,737.50 between cylinder and fan scales. I assigned no part of it to second-hand sales.

Then testimony as follows:

Q. Now, how did you divide that total of exchange scale account of $24,737.50, and when I say "how" upon what figures did you divide, how did you arrive at which you have?

A. In the relationship which as regards cylinder scale allowances, in the relationship which $22,672.05 bears to $50,658.66.

Q. Give me those figures again, $22——

A. $22,672.05 bears to $50,658.66.

Q. Where did you get the figure, $22,672.05?

A. By taking a percentage, $154,758, being the amount of cylinder scale sales.

Q. Oh, tell us your way of arriving at it, not figuring it backward, go forward. What did you begin with?

A. I took $154,758.

Q. Oh, take your percentage which you had to get it, what did you get it from? Come at it the other way, don't go backwards like a crawfish, tell us how you got it. First, you got something with reference to the year 1911. Tell us what it was and how you got it.

A. The figure of $22,672.05 was 14.652% of $154,758.

Q. Where did you get your percentage figure, 14.652?

A. That is the relationship of——

Q. How did you get it?

A. I am going to tell you.

Q. Tell me what figures you divided instead of weaving around.

A. I am about to tell you.

Mr. Meads: I must ask the Master to instruct counsel to
1030 let the witness answer and then if there is any question——

Mr. Zane: I am going to have him answer my question.

(Discussion.)

Q. Now, you have got a per cent figure of 14.652%. What figure did you divide into what figure to get that percentage?

A. I was about to tell you when you interrupted me.

Q. All right, tell me how you got the figure.

A. 14.652 is the per cent which $117,885.06 bears to $804,565.01.

Q. Now, did you divide $804,565.01 into $117,885.06 to get the percentage figure of 14.652?

A. I did.

Q. Where did you get $117,885.06?

A. From my statement of the——

Q. Give the exhibit number.

A. My statement of the profit and loss account for the year 1911 as shown in Defendant's Exhibit No. 21 adjusted to take up the adjustments set forth in Defendant's Exhibit No. 26.

Mr. Meads: That is the treating of all the repossessed scales sold as new, that's what you mean, is it not, Mr. Seatree?

A. That's exactly what I mean.

Mr. Zane:

Q. Is that found on page 1 of your Exhibit 21?

A. On page 1 of Defendant's Exhibit 21 you will find the sum of $117,885.06 and the figure of sales that I gave you, $804,565.01, is the figure of $800,552.01 shown on page 1 of Defendant's Exhibit 21, adjusted in respect of the cylinder sales amounting to $4,010.99 shown in Defendant's Exhibit 26.

Q. Now, your figure of $4,010.99 which you added to the total clyinder revenues on page 1 of Exhibit 21 represents the amount

of the selling price of cylinder scales in Exhibit No. 39 which you contend were second-hand scales sold as new, is that it?

A. It is putting back—I will express it in this way. It is putting back into the cylinder scale sales certain cylinder sales which we had previously taken out and thrown into second-hand. It is putting them back into new cylinder sales on the theory that all repossessed cylinder scales were sold as new and that they in the

1031 first instance have been transferred by us.

Q. Don't you know that item has nothing to do with the repossessed scales? Is not that the item which you say you found marked on Marwick, Mitchell, Peat & Company's papers as in new scales which were marked second-hand, and is not that what you were talking about?

A. I don't recall just exactly the precise figure it was. Perhaps I can tell. (Examine papers.) The item is described fully on page 2 of Defendant's Exhibit 22 which relates to the taking of the item out of the figure that Marwick, Mitchell, Peat & Company had, and, as I say, this particular item under discussion is putting it back again. The taking out of the item is shown on page 2 of Defendant's Exhibit 22.

Q. Yes, and is $4,010.99?

A. It is, yes.

Q. Which you say was for scales sold which were in fact second-hand scales?

A. What I said here was that they were, according to the records we had, second-hand and rebuilt cylinder scales included by Marwick, Mitchell & Company in the new cylinder scale sales, but which were treated by us as second-hand, and in case there was any doubt I put them back here and called them new cylinder scales.

Q. You mean they were on the books as new sales, don't you?

A. I think they are included without question in the new scales sales account, yes.

Q. So you had then for your year 1911 $804,565.01 as the gross cylinder sales for that year?

A. As adjusted in that way, yes.

Q. You divided that gross into $117,885.06 which was marked on your page 1 of Exhibit 21 as the total of all deductions from gross sales value?

A. No.

Q. Is not that what it is marked on there?

A. It is total of all deductions under that particular sub-heading.

Q. Yes, your wor*k*s are on that exhibit: "Total of all deductions" and that phrase is followed by the figures under "Cylinder revenues" $117,885.06?

A. Which is the total of all deductions of that group heading.

Q. Oh, answer the question. Is not the figure I have read

1032 after the words which I quoted, "Total of all deductions"?

A. It is, it follows that phrase.

Q. Yes. Now, the deductions are as a matter of fact deductions for Toledo scale allowances, scales of all makes taken in exchange and special allowances, are they not?

A. They are, yes, those three.

Q. Those three on your page 1 of Exhibit 21, and in addition to that $686.58 which you say in your account was not specifically allocated?

A. That is right.

Q. So that the amount of $117,198.48 plus the unallocated item of $686.58 making a total of $117,885.06 is your total allowance account against cylinders for the year 1911?

A. It is the total of the allowances charged on the books in the year 1911 which we allocated to new cylinder scale business.

Q. Well, it is in your account here on page 1 of Exhibit 21 as the total of the allowances against cylinders, is it not?

A. In the column headed new cylinder scale business.

Q. Yes, and it is intended to be and is as a matter of fact a deduction from gross sales after deducting charge-backs account?

A. Yes.

Q. Now, when you divided the gross sales figure, $804,565.01, into your allowance account, you got the proportion of allowances to gross sales, did you?

A. Yes, sir.

Q. For the Year 1911?

A. As charged on the books for the year 1911.

Q. Yes, and that figure was 14.652%?

A. It was, yes, sir.

Q. Now, with that figure obtained from 1911 of 14.652% you applied that percentage to the figure $154,758 which was the total of cylinder scales for the year 1907?

A. That is right.

Q. What did you get in the application?

A. $22,672.05.

Q. Having obtained that figure of $22,672.05 what did you do with that figure?

A. Tentatively I allowed it to rest until I got another figure.

1033 Q. And your other figure is $50,658.66?

A. No, the next figure is the corresponding sum obtained in respect to fan scale sales amounting to $27,986.61.

Q. Well, you obtained that for fan scales in the same year?

A. I did, yes, sir.

Q. That is to say, on your page 1 of Exhibit 21 you took the total of fan scales, $518,320.57, and you added to it what?

A. $2,424.50.

Q. And you got that from Defendant's Exhibit 26?

A. Yes.

Q. And that represents?

A. $520,745.07.

Q. No. I am asking you still about the $2,424.50. That represents, according to your claim, fan scales sold as new which were in fact second-hand?

A. It represents the restoration to the new fan scale sale account the sum of $2,424.50 which we had removed from that account on

the theory they were second-hand scales. It is an exactly similar item to the $4,010.99.

Q. Yes. Now, your total was?

A. $520,745.07.

Q. Then you went down and got your figure for the total allowances which was $31,896.75?

A. Yes.

Q. And you divided $520,745.07 into $31,896.75 and what percentage did you get?

A. 6.125.

Q. Per cent?

A. Yes.

Q. Now, having obtained that percentage figure for fans of 6.125%, what did you apply that percentage figure to?

A. $456,924.30.

Q. The total of fan sales for the year 1907?

A. Yes.

Q. And that gave you what figure?

A. $27,986.61.

Q. Now, those two figures, $22,672.05 and $27,986.61, what did you do with them?

A. Added them together?

Q. And that made?

1034 A. $50,658.66.

Q. What did you do next?

A. I then apportioned the sum of $24,737.50, the allowances entered on the books in the year 1907 already testified to, between cylinder and fan scale business on the basis of the ratio as regards cylinder scale business that $22,672.05 bore to $50,658.66; as regards fan scale business the ratio that $27,986.61 bore to $50,658.66.

Q. Well, you divided $50,658.66 into $22,672.05?

A. No, I didn't do it that way.

Q. What?

A. I didn't do it that way.

Q. How did you do it?

A. I divided $50,658.66 into $24,737.50 and multiplied the answer by $22,672.05 as regards cylinder scale business and $27,986.61 as regard the fan scale business.

Q. Very well, you divided $50,658.66 into $24,737.50 and you got what percentage figure?

A. Well, I have not preserved that figure. I didn't make a memorandum of it on this paper, but I have got the final answer if you want to know it of course.

Q. You have not preserved that figure?

A. No.

Q. Tell us what that figure is that percentage figure of $50,658.66 divided into $24,737.50.

A. As I say, I have not got a memorandum of it. I need to work it out if you want to wait for me.

Q. Yes, work it out.

A. It would be about 48.8.

Q. Now, you took that percentage of 48.8% and what did you do with it?

A. Of $22,672.05 as regards cylinder scale business and of $27,986.61 as regards fan scale business, the sum of the two answers made $24,737.50, the actual allowances entered on the books in that year.

Q. Now, 48.8% of $22,678.05 is $11,071.15?

A. Yes.

Q. And 48.8% of $27,986.61 is $13,666.35?

A. Yes.

Q. What you have done then in effect is to apply the proportions between allowances on cylinders and fans that held in the year 1911 according to your account to the total allowances for the year 1907 in order to divide those allowances between cylinders and fans?

A. Yes, I have preserved the differential between those
1035 two, or the ratio of the differential perhaps would be a better way to express it.

Q. Now, the ratio of your gross sales to allowances in the year 1907 was about four per cent, was it not?

A. The average ratio taken, cylinders and fans combined, was 4.044.

Q. Now, in the year 1911 the ratio of allowances to gross sales——

A. Was 11.421.

Q. —was 11.421?

A. Yes.

Q. Did you do that of yourself, that is, apply the ratio of 1911 to the year 1907 on your own initiative, or were you told to do it by somebody?

A. The method I used there was on my own initiative.

Q. Did you consult anybody in regard to it?

A. Not until after it was done.

Q. You submitted it to the attorneys after it was done?

A. That's all.

Q. Before you testified?

A. Yes.

Q. Now, your manufacturing cost was the next item, was it not?

A. Yes.

Q. You got the total manufacturing cost from Exhibit 13?

A. Yes, that is to say, from cylinder and fan scales combined.

Q. Yes. For the year 1907?

A. Yes.

Q. What figure did you get?

A. The manufacturing outlays on the production as shown on page 2 of Defendant's Exhibit 13 were $181,535.32, from which I——

Q. Now, is that a total made up of items upon Exhibit 13?

A. Yes.

Q. What are the items entitled?

A. Tools and patterns experimental, material, factory supplies, packing and shipping, manufacturing expense, direct labor, indirect labor, superintendent and factory, office, power, heat and light,

maintenance, repairs and alterations, second-hand scale ex-
1036 pense, total $182,444.65, less discount on purchases $909.33, giving the net figure shown on page 2 of $181,535.32.

Q. Now, you say on there second-hand scale expense, don't you?

A. I see it now. As a matter of fact, at the time I took this I don't recall that I noticed it specifically. I used the figure of $181,535.32 which appears on page 2 as a total.

Q. Why didn't you take that second-hand scale expense right there before you and apply it against second-hand scales?

A. Presumably because I didn't notice it at the time. As I say, I took the total figure.

Q. All right. Now then, you had an item to deduct from the total manufacturing cost for all kinds of scales of $181,535.32?

A. Yes.

Q. The increase in stock, that was $30,196.12?

A. It was.

Q. And the deduction gave you net manufacturing cost $151,339.20, didn't it?

A. $151,339.20.

Q. Yes, and you added to that as a part of the manufacturing cost the item of insurance?

A. $1,200.

Q. Where did you get that?

A. Page 1 of Plaintiff's Exhibit 13.

Q. Which is the yearly statement of the defendant's business constructed by the defendant?

A. It is, yes.

Q. And you also added $1,653.62 for taxes?

A. Yes.

Q. And your total was what?

A. $154,192.82.

Q. Insurance and taxes are considered by this company on its annual statement as a part of its general commercial and selling expense, is it not?

A. It appears under that heading, yes.

Q. Well, where they enter it they enter it on their general administrative expense?

A. They do, yes.

Q. You differ from that and think it ought to be entered under the head of manufacturing expense?

A. As a general proposition, yes.

1037 Q. Now then, this total of $154,192.82 for the year 1907 you undertook to divide between cylinders and fans on the basis of the manufacturing cost as you had made it in 1911, didn't you?

A. I preserved the differential in the ratio as expressed in a percentage to net sales, yes.

Q. Well, you use the term "differential in the ratio," what do you mean by that?

A. For example——

Q. No.

A. I can explain it better by an example. Supposing the ratio to sales of two given departments was, say 30% and 20% in one year, and in another year it was just half of those sums, 15% and 10%, the spread between 20 and 30 would be 10; the spread between the 10 and 15 would be 5, but the ratio of defferential would be preserved.

Q. You don't mean "defferential", you mean "differential", don't you?

A. Differential is what I mean.

Q. Now, in other words, you have kept for 1907 the division between cylinders and fans in the same ratios that you made it for 1911?

A. Yes.

Q. That's what you mean?

A. Yes.

Q. Now, tell us how you worked that out, beginning where you started first, and come down to the other end. Don't begin at the other end and go back is what I am talking about.

A. What you want is the steps I took and not the result?

Q. Exactly, tell us the steps, begin first and come down. I didn't mean to say anything that would necessarily offend you by saying you were pursuing the crawfish process. You can see you began at the end and went to the beginning instead of beginning at the beginning and comig to the end.

A. I misunderstood your point. You want the steps, I thought you just wanted the result. You want the steps.

Q. Yes.

A. I took the——

1038 Q. Now, don't go too fast and when you mention a sum tell us from what paper you took it.

A. I commenced with the figures as shown on page 1 of Defendant's Exhibit 21 which as stated on my direct examination I transcribed onto the sheet I have now before me. The cost figures there as shown as regards the cylinder scale business in the sum of $143,067.84 divided into two items, $124,068.65 and $18,999.19, and as regards fan scale business, $122,349.92 and $18,735.79.

Q. Just give the total.

A. $141,085.71. Those tems I adjusted by the items affecting cost as shown on Defendant's Exhibit 26, namely, I added $1,068.69 and deducted $1,049.75 as regards cylinder scale business.

Q. Oh no, to cylinders how much?

A. I take that back. First of all I increased the cylinder scale costs by the sum of $18,344.78 and $1,068.69 and $5.06 and reduced it by the sum of $1,049.75, all of which appears on Defendant's Exhibit 26.

Q. The $18,344.78 is what?

A. It is the amount by which the actual outlays in the year 1911 exceeded the estimated costs for that year as appertaining to the cylinder scale business in respect of the proportion by which I had reduced that excess cost by the sum which I in the first place had

charged to the second hand scale business on the assumption that the repossessed scales were included in the second-hand scales.

Q. All right. Now, the $1,068——

A. And 69 cents.

Q. —is what?

A. It is the cost as estimated of the $4,010.99 which was transferred back.

Q. Yes, and the $5.06 was what?

A. That was just——

Q. Miscellaneous?

A. No, it was the readjustment caused by a disturbance of the base figures on which it was originally calculated.

Q. Now, when you did this you obtained for the year 1907 so far as you are going to apply to the figures the contention that all repossessed scales were sold as second-hand?

A. I have compiled the statements for each year submitted
1039 in my testimony of March 15th and so on on the theory that all repossessed scales were sold as new.

Q. Yes. Very well. Now, you deducted $1,049.75, what was that for?

A. By restoring the cost of the scales which I transferred back to new and considering them at the estimated cost I reduced thereby the excess of actual over estimated and pro-rated on the basis I pro-rated the original year.

Q. Now, what did you get your total then for the manufacturing cost of cylinders?

A. $143,067.84, and the corresponding cost for fan $141,085.71.

Q. That's your original figure before adjustment, but you are telling us how you adjusted it.

A. Excuse me, I read from the wrong sheet.

Q. What did it become after you adjusted it?

A. Those two figures I gave should be cancelled. The two figures should be $161,436.62 and $159,152.20.

Q. Well now, tell us the same thing for fan, how you got that. Page 1 of Defendant's Exhibit 21 you went to first.

A. The original figure there is $141,085.71 to which should be added $18,090.49, $1,016.26 and a deduction of $1,035.20 and a deduction of $5.06.

Q. Now, that $18,090.49 is found on your Exhibit 26?

A. Yes, as are the other three items I read.

Q. As well as the other three items?

A. Yes.

Q. That gave you the figure of?

A. $159,152.20 as representing the new fan scale costs for the year 1911.

Q. Now, having those two figures, what did you do with them?

A. I found what percentage of what ratio they bore to the net sales by dividing as regards cylinder scale business——

Q. To net sales?

A. To net sales in this instance.

Q. To net sales in this instance, all right. What did you have cylinder net?

A. $711,178.84.

Q. On what page do you find that, on page 1 of Exhibit 21?

1040 A. It commences with the $804,565.01, the adjusted figure which I have already testified to this afternoon, from which is deducted the charge-backs of $93,886.17.

Q. And what did you get?

A. $711,178.84.

Q. That represents $707,167.85 on your page 1 of Exhibit 21 with how much added to it?

A. $4,010.99.

Q. Very well. So you found the ratio between your cylinder net sales and your figure of $161,436.62?

A. I did.

Q. And what was it?

A. 22.7.

Q. And you found your fan net sales what?

A. $461,576.62.

Q. And that $461,576.62 represents the net sales on page 1 of Exhibit 21 of the defendant, $459,152.12 plus?

A. $2,424.50.

Q. On Exhibit 26 of the defendant?

A. Yes.

Q. Very well. Then you took the ratio of the net sales to that total fan manufacturing cost and what did you get?

A. 34.5.

Q. 34.5%?

A. Yes.

Q. Having those percentages for 1911, what did you do then with reference to the year 1907?

A. I found what the manufacturing cost as measured by those ratios to the net sales for the year 1907 would have been.

Q. Well, go on and tell us.

A. By multiplying as regards cylinder scale business the net sales of $147,836 by 22.7 and as regards fan scale business the sum of $420,842.84 by 34.5.

Q. Then what figures did you have?

A. As regards cylinder scale business I obtained a figure of $33,558.77 and as regards fan scale business $145,190.78.

—. Then what did you do?

A. I added them together and got the sum of $178,749.55.

Q. Go on and tell what you did next.

1041 A. Then I divided the actual costs for that year of $154,192.82 as between cylinder and fan scale business on the basis of the ratio that the items of $33,558.77 as regards cylinder and $145,190.78 as regards fan bore to the total of $178,749.55.

Q. Well, your ratio for cylinders was what?

A. Do you mean the resultant ratio or the amount of money I got?

Q. We have got the amount of money, but it is the ratio. What was the figure?

A. I would have to work that percentage out.

Q. Well you got it by——

A. By dividing $178,749.55 into $154,192.82 and multiplying the answer by the two component parts of the $178,749.55 representing cylinder and fan scales respectively, and multiplied that out and got the following result: Cylinder scale business $28,948.47 which was equivalent to 19.58% for the new cylinder scale sales, and $125,244.35 as representing the fan scale business which was equivalent to 29.76% of the net fan scale sales.

Q. In your maufacturing cost as divided between cylinders and fans is included all second-hand expense?

A. There is included the sum of $225.25 which is indicated on page 1 of Plaintiff's Exhibit 13.

Q. That's all you can actually tell of the second-hand scale expense?

A. There may be others. That's all that shows on that page.

Q. That's all that shows on that page?

A. Yes.

Q. In other words, that's all that is ear marked?

A. That's all that's ear marked, yes.

Q. Now, your next item of expense for the year 1907 was commissions. You took your total of $194,757.15 from Exhibit 13, did you, of the plaintiff?

A. I did, yes.

Q. Now, you divided that on the basis of a ratio of 1911. Now, tell us what that ratio was and how you arrived at it.

A. I commenced with the figures shown on page 1 of Defendant's Exhibit 21.

Q. Commissions?

A. Commissions.

1042 Q. And what was your figure?

A. There are two items, $188,229.85 and $712.09, as appertaining to cylinder scale business, and as regards fan scale business $130,680.38 and $495.30. I adjusted that as regards the item of $313.15 shown on Defendant's Exhibit 26 which I charged to fan scale business.

Q. Well, what did you do, deducted it how?

A. I took it from the second-hand and charged it against the fan scale business.

Q. $313.15?

A. $313.15.

Q. Well, first tell us what you added to cylinder commissions.

A. I didn't have anything to add to them.

Q. Nothing to add?

A. No, nothing to add to them.

Q. Your total cylinder commissions figure was $188,941.94?

A. It was.

Q. And fan business was $131,488.83?

A. It was.

Q. What was that figure, $313.15, where did that come from?

A. Defendant's Exhibit 26.

Q. And what does it represent?

A. It's a readjustment of the commissions appertaining to the $2.424.50.

Q. Very well. Now, you have the fan commissions and cylinder commissions?

A. And I also in that case have a second-hand commission of $28,479.39.

Q. That's an adjusted figure, is it?

A. Yes, it is reduced by the $313.15.

Q. You took $28,683.95, added to it $108.59 and deducted from the result $313.15?

A. I did, yes.

Q. Very well. You got what?

A. $28,479.39 as representing commissions.

Q. Then what did you do next?

A. I then found what ratio that commission bore to what I might describe as the cash portion of the sales for that year, that is to say, I divided the amount by the net sales after deducting the allowances upon which a commission is not paid.

1043 Q. Very well. Let's take cylinders. You gave $188,-941.94.

A. Yes. I divided that by the sum of $593,293.78.

Q. That was your figure on page 1 of Exhibit 21, $589,282.79 plus $4,010.99?

A. It is.

Q. Very well. And what was your percentage there?

A. 31.85, and I did the same thing for the fan scale business, dividing $429,679.87 into $131,488.83, and I got that percentage, 30.6, that is the sum of $427,255.37 shown on Defendant's Exhibit 21 plus $2,424.50.

Q. On Exhibit 26?

A. Yes.

Q. That figure, $429,679.87——

A. I divided into $131,488.83, the amount of the commissions, and arrived at a percentage of 30.6.

Q. Very well, then for the second-hands.

A. I divided the sum of $100,354.76 into the sum of $28,479.39 and got the percentage of 28.38. The $100,354.76 is the sum of -106,790.25 shown on Defendant's Exhibit 21, less the sum of $6,435.49 shown on Defendant's Exhibit 26.

Q. And the $6,435.49 was deducted for the total of second-hands sold as new?

A. It is the sum of the two items which I charged back or credited back to new cylinder and new fan respectively.

Q. And you got 28.38% for that?

A. Yes.

Q. Then what did you do?

A. I then found what the commission would have been for the year 1907 as based on those percentages by multiplying $136,764.85 by 31.85%.

Q. And the $136,764.85 was what?
A. It's $154,758, being the gross sales for the year 1907——
Q. $154,758?
A. —from which I deducted the charge-backs, $6,922, and the amount of allowances that I charged to that account of $11,071.15, the two together deducted from $154,758 gives $136,764.85.
Q. Very well.
A. Then as regards——
1044 Q. Well, what did you do with that?
A. I said before I multiplied that net figure by the per cent of 31.85%.
Q. And what did that give you?
A. That gave me $43,559.60.
Q. Forty-three thousand and what?
A. 559.60.
Q. Yes, and what do you call that?
A. Well, that' part of a figure I am going to use later on, part of a total.
Q. Yes.
A. I then multiplied the corresponding figure for fan scale sales of $407,176.49.
Q. That was obtained by deducting what?
A. Deducting from the gross sales of $456,924.30 the charge backs of $36,081.46.
Q. And allowances?
A. And allowances of $13,666.35.
Q. All right. You had $407,176.49.
A. 30.6% of which was $124,596.01. I then took 28.38% of $850, the second-hand scales sales for that period, which gave me $241.23. The sum of all those three items was $168,396.84, that is to say, the sum of $43,559.60, $124,596.01 and $241.23 was $168,396.84.
Q. Those three items together?
A. Make $168,396.84, being what the commissions would have been on the 1911 business. The actual expenditures for commissions for the year 1907 were $194,757.15 which is obtained from page 1 of Plaintiff's Exhibit 13.
Q. All right, what did you do next?
A. I then divided the sum of $194,757.15, the actual expenditures, as between cylinder, fan and second-hand on the basis of what they would have been on the 1911 basis, in other words, I found what percentage $194,757.15 was of $168,396.84, being one hundred per cent plus of course.
Q. It would be more than one hundred per cent?
A. Yes.
Q. In other words, you divided $168,396.84 into $194,757.15 and that gave you?
A. I have not got that percentage, but multiplying the answer by the figures of $43,559.60, being the proportion which
1045 would relate to cylinder scale business, giving me $50,378.28.

Q. Well, you took that percentage figure and multiplied it.
A. By $43,559.60 and got an answer of $50,378.28.
Q. For cylinders.
A. And for fans I got a corresponding answer of $144,099.87 and for second-hands I got an answer of $279.00. The relative cash values being respectively: cylinders 36.84%, fans 35.39%, second-hands 32.84%.
Q. Therefore, if you take those three items, exchange scales, manufacturing cost and commissions, you found the exchange allowances and the manufacturing cost were too small in 1907 to suit the 1911 ratio?
A. Apparently the costs were higher in 1907. If that is a fact, apparently they were higher than they were in 1911, possibly matrial or labor were more costly.
Q. You say the manufacturing cost was higher?
A. I say if that's true, what I understand you to say, the manufacturing cost was higher in that year.

(Question read as follows: Therefore if you take those three items, exchange scales, manufacturing cost and commissions, you find the exchange allowances and the manufacturing cost were too small in 1907 to suit the 1911 ratio?)

Q. (continued). That's what you found, was it not?
A. The average allowances on cylinder and fan combined in the year 1907 was less than it was in the year 1911 and the average cost of the cylinder and fan combined in the year 1907 was less than it was in the year 1911 and the average cost of the cylinder and fan combined was less, in its relationship to net sales was less than it was in the year 1911.
Q. Now, how about commissions?
A. Commissions, the average ratio was substantially larger as I recall it.
Q. Yes. In 1907 was larger than in 1911?
A. Yes, was larger than in 1911.
Q. Yes. Your next item of expense is commercial and selling. Let us find how you managed to divide that.
A. That is just pro-rated on the basis of the gross sales for the year 1907.
Q. Well, you got your commercial and selling?
1046 A. I got $143,106.67.
Q. Well, you didn't find any such figure as that on Exhibit 13, did you?
A. It is the sum of a number of items appearing on Exhibit 13 after deducting the commissions and after deducting bond interest and other interest.
Q. Well, what total figure did you start with there?
A. I started with the figure of $346,273.98 which appears on page 2 of Defendant's Exhibit 13. From that I deducted the sum of commissions, $194,757.15, the figure of bond interest, $5,087.51, interest $629.32, insurance $1,200.

Q. Taxes?
A. $1,653.62.
Q. And what credit?
A. I added back a credit of $160.29.
Q. What was that, Canadian?
A. Repairs on scales, $160.29. The net difference is $143,106.67.
Q. Now, you divided that on the basis of gross sales?
A. Yes.
Q. Shown above in your gross sales of cylinders and fans?
A. And second-hands.
Q. Well, you don't give any of that commercial and selling to second-hands?
A. Yes, I do.
Q. How much?
A. $198.59.
Q. That was not spoken of in your other testimony—$198.59?
A. $198.59.
Q. Now, dividing it on the basis of gross sales you got $36,146.30 allotted to cylinders and $106,751.78 allotted to fans and $198.58 allotted to second-hand scales?
A. Yes.
Q. Well, what did you do next?
A. I then found what the net salvage was on the second-hand division and pro-rated it back over cylinder and new fan scales.
Q. Your figures don't seem to balance. Let's call them again. Commercial and selling for cylinders is what?
1047 A. $36,156.30.
Q. That makes the correction. Very well, you got your second-hand scales saving by taking $850 and deducting from it $198.59?
A. Yes, and $279 commissions, and added back a credit of $160.29, making a net salvage of $532.70.
Q. What back did you say?
A. Add back did you say?
Q. Yes.
A. $160.29, the credit which I took out of the commercial expenses.
Q. And that gave you a balance, didn't it, of——
A. $532.70.
Q. How much?
A. $532.70.
Q. And that you divided on the basis of what?
A. Of the allowances chargeable to new cylinder and new fan.
Q. You said in your direct examination allowances chargeable to second-hand scales. You didn't mean that, did you?
A. If I said that, that was a mistake. I didn't mean to say that. I have not seen the testimony that I gave.
Q. No, I took it down at the time. Now, when you gave those figures you found that your profit on cylinders was $21,520.21?
A. Yes.
Q. And your profit on fans was $31,374.78?

A. Yes.
Q. You next deduct three per cent on the gross sales for losses?
A. Yes.
Q. That is to say, for cylinders you took three per cent of $154,758?
A. To commence with, yes.
Q. And what did that give you?
A. That gave me $4,642.75.
Q. Four thousand what?
A. $642.75.
Q. What did you add to it?
A. $11.41.
Q. What for?

A. The proportion of the agents' losses which would be
1048 chargeable there in respect to three per cent of the second-hand scale sales as divided on the basis of the credit allowed for salvage.

Q. So that gave you a total of $4,654.16?
A. Yes.
Q. And you applied the same thing to fans?
A. Yes.
Q. Getting losses on fans of $13,721.82?
A. Yes.
Q. You added in there a proportion of agents' losses on second-hands of how much?
A. $14.09.
Q. Your next matter was to figure out the interest on investment?
A. Yes.
Q. Now, let us see what you took for that, give us your figures.
A. For the year 1907 I took interest on the sum of $423,237.69.
Q. Very well. Now, that's a total. Let's find out how you got it. What did you add together and what did you deduct?
A. I took the total capital stock at January 1, 1907.
Q. Capital stock January 1, 1907, how much was that?
A. Preferred stock $220,000.
Q. Well, what is your capital stock?
A. Preferred capital is $220,000 and common is $300,000, the two together making $520,000.
Q. Very well, what next?
A. Then I added the outstanding bonds of $67,000.
Q. Did they increase or decrease during the year?
A. The capital stock increased during the year by the sum of $10,300. The bonded indebtedness increased during the year by the sum of $33,000.
Q. Very well. That's your bonded indebtedness January 1, 1907?
A. Yes.
Q. What next?
A. Floating debt at that date of $25,000, the surplus at that date of $185,053.02, undivided profits $47,902.86. The sum of those items is $844,955.88.
Q. Very well.

A. From that I deducted the intangible values of good will, organization expenses, and so forth, of $444,209.50.

1049 Q. How much was the good will?

Q. I have not got the item divided here. I have got it all in one item—$444,209.50.

Q. Good will and what else?

A. I think organization expenses were included in there and some other items. That left a net investment of——

Q. That left you how much?

Q. A net figure of $400,746.38 which was represented by tangible assets of $437,998.09 less current liabilities other than floating debt of $37,251.71. That leaves the same net figure as previously mentioned of $400,746.38.

Q. Now, let us see your tangible assets, what they are.

A. I have not got the summary of them here. I suppose I could figure it out.

Q. Can't you take them off of Exhibit 13?

Q. I dare say.

Q. Let's see what they are, tell us what you took for tangible assets. Just call off the tangbile assets and what is on Exhibit 13.

Mr. Meads: Give him time to pick them out. You have *answered* for a selection.

Mr. Zane: I am not asking for a selection, I am just asking him to read from Exhibit 13.

Mr. Meads: They are not grouped.

A. Real estate and buildings $32,665.98, machinery $15,285.34, tools and batteries $22,680.34, plating plant $865.95, office fixtures $3,029.20, agency office fixtures $600.00, kitchen and dining room equipment $581.88, horses and wagons $795, sample cases $6,137.75, factory equipment $4,376.69, inventory material $43,440.59, factory supplies $7,995, packing crates $2,931.49, fuel $69.16, advertising matters $1,463.91, stationery and office supplies $3,528.38, new scales in stock $9,482.50, scales on consignment $30,385.12, scales loaned to customers $303.06, unexpired insurance premiums $959.82, accounts receivable $43,295.60, bills receivable $144,923.34, agents' accounts $59,264.46, cash $2,937.61. That gives you the figure of $437,998.09, from which I deducted the current liabilities other than on floating indebtedness which I regarded as part of the capital, purchase accounts $7,514.83, Gurney Scale Company $659.65, prospective commissions $20,126.27, agents' accounts $8,113.46, accrued bond interest $837.50; that makes $37,251.71 which de-

1050 ducted from the $437,998.09 gives the net investment as represented by the net assets of $400,746.38, being the amount of the investment on January 1, 1907. Now, the average investment for the year 1907 was $423,237.69.

Q. How did you find that average investment?

A. By adding the total investment as of January 1st to the additional investment for one year. I might express it this way. The additional investment during the year reduced to the equivalent of the amount invested for one complete year.

Q. Well, tell us in figures what that is.

Q. Well, the bonded indebtedness was increased as follows: In January there was $5,000, in February there was $15,000, in July there was $7,000, in September there was $6,000. The floating indebtedness was reduced in February by $15,000 in July by $5,000 and in October by $5,000. The capital stock was increased in July by $10,300. The floating indebtedness in the month of January was reduced $2,428.24 and in February it was increased by $1,922.51, in March it was increased $2,530.38, in April it was increased by $2,986.68, in May it was increased by $51,790.15, in June it was increased by $3,915.59, in July it was reduced by $7,405.80, in August it was increased by $5,736.78, in September it was increased by $3,162.92, in October it was increased by $7,232.04, in November it was increased by $1,513.01, in December it was increased by $18,357.02.

Q. Well, by the end of the year the investment had increased to what figure?

A. To the sum of $459,359.32 which was equivalent to an increased investment for the entire year of $22,491.31.

Q. That is not what you mean, is it? What was the total investment January 1st, 1908?

A. It was $459,359.32.

Q. Well——

A. It was increased during the year from $400,746.38 to $459,359.32.

Q. Well, that was a total increase of over $58,000 but an average additional investment for the whole year of about $22,000?

A. $22,491.31.

Q. Yes. Now, did you make any attempt to ascertain how much of this investment existed before the manufacture of cylinder scales began?

1051 A. No, I didn't.

Q. Why, you knew the rule, didn't you, that the Toledo Company would have no right to claim interest on investment except on the additional investment made for the purpose of manufacturing cylinders?

Mr. Meads: I object to the question. There is no testimony — there is any such rule; on the contrary, that is not the rule.

Mr. Zane: It is the rule.

Mr. Master: That is for the purpose of testing the knowledge of the witness. Objection overruled.

(Question read.)

A. I didn't know there was such a rule, no.

Mr. Zane:

Q. Did you find what the investment was at the end of 1906?

A. That is the figure I have given you.

Q. Just where did you begin, January 1st?

A. Yes.

Q. Now, did you find it at the beginning of 1906?

A. I did, yes.

Q. Now, what was the investment January 1st, 1906?

A. On December 31, 1905, which would be the same as January 1, 1906, the investment was $330,979.04.

Q. How was that made up?

A. In just the same way as I described for the amount as of December 31, 1906.

Q. Just take the Exhibit 15 and extract from it in the same way as you did before the investment. Exhibit 15 is the yearly statement of defendant for the year 1905, is it not?

A. Yes.

Q. Very well. Give us now the preferred and common and so on.

A. The preferred stock was $211,000 and the common stock was $300,000, making $511,000.

Q. What next?

A. The bonds outstanding were $37,000 and the floating debt was $35,000, the surplus was $123,703.97, and the undivided profits $68,484.57, making $775,188.54.

Q. Very well. You deducted what?

A. $444,209.50.

Q. Now, the $444,209.50 represented what?

A. Patents $259,440.05.

Q. What else?

1052 A. Organization $184,769.44, leaving a net investment of $330,979.04.

Q. Now, for the year 1906 you constructed an account on the same basis as you did the year 1907?

A. I did, yes.

Q. Now, for 1908 what did you have for the gross sales of cylinders?

A. $5,760.

Q. Where did you get that?

A. From the statement of profits for the cylinder business for the year 1906 as shown by Plaintiff's Exhibit 40.

Q. Your gross fan sales were what?

A. $520,925.

Q. Your second-hands were what?

A. None were shown for that year separately.

Q. Now, your next item was of course the charge-backs for cylinders, how much?

A. $216.00.

Q. Where did you get that?

A. Plaintiff's Exhibit 40.

Q. Your fans?

A. $38,859.24.

Q. And nothing for second-hands?

A. I have not anything for second-hands on this year at all.

Q. Very well. Just leave that account on one side. Your allowance account for cylinders?

A. $478.13.

Q. Fans?

A. $18,076.32.

Q. Your percentages were the same that you figured on in this year that they were for the year 1911 which you used for the year 1907?

A. As the basis of apportionment, yes.

Q. Up to the time when you reached the allowance account of 1906 your ratio figures are exactly the same?

A. I don't know whether I quite understand you or not.

Q. Let me put it to you in this way. You found certain ratio figures for the year 1911 which you applied to the allowance account of 1907?

A. Yes.

Q. You applied precisely those same figures to the allowance account in 1906.

1053 A. In the first place, yes.

Q. What did you find for the total allowance account in 1906?

A. $18,554.45.

Q. Now, the percentage figures that you had from the year 1911 was what?

A. 14,652 for cylinders and 6,125 for fans.

Q. Those were the same percentage figures you had before?

A. Those were the ones that in 1911 investigation developed and which I applied to the year 1906 for the purpose of obtaining a basis of distribution of the 1906 actual allowances.

Q. Now, to what did you apply for the year 1906 your percentage figure of 14.652?

A. The sum of $5,760.

Q. Gross sales of cylinders?

A. Yes, sir.

Q. And you applied your percentage figure for fans to the gross sales of fans?

A. Yes, $520,925.

Q. Then you added that result in the same way?

A. I did, yes.

Q. You took a percentage of it in the same way you did before?

A. Found what the ratio of the actual allowances was to the total of what they would have been on the basis of the 1911 percentages and pro-rated it.

Q. You never have worked this account out in this way and put it down on paper, have you, except on your working sheets?

A. No, I have not.

Q. Why didn't you have that copied?

Mr. Meads: I object to that question. How is it material why didn't he have his working sheets copied? Did Marwick, Mitchell, Peat & Company have their working sheets copied, how is it material?

Mr. Zane: The question he is asked is this, why he didn't have the results of those computations tabulated and put in the form in which all the other computations have put in in this case.

Q. Why didn't you do that?

A. Well, in the first place it never occurred to me that they would be required in this form, and in the second place I question

1054 if I should have had time to do it anyhow because I think they were only finished the day before I testified.

Q. You have had three days since you testified before—four days.

A. Yes, but I was not asked for them on my last testimony.

Q. Now, looking at your working sheets there, is the exchange scale account proportionately lower or higher than in 1911?

A. It is proportionately lower to sales, in the year 1911 the ratio of allowances to cylinder scale sales was 16.

Q. I don't think we need waste time on the lower figure, but it is?

A. 16 plus, and in 1906 the corresponding figure in its relation to sales was 8.3.

Q. Now, is manufacturing cost in 1906 proportionately lower or higher than in 1911 on your figures?

A. The ratio for 1911 of manufacturing cost is 22.7 and for 1906 it works out at 16.96.

Q. It was much lower then proportionately in 1906?

A. It was.

Mr. Meads: That's on all products?

A. Yes.

Mr. Meads: Cylinder and fan?

A. The fan cost ratio for 1911 is 34.5 and for 1906 it is 25.75.

Mr. Zane:

Q. One of those you have given is cylinder and the other is fan?

A. Yes.

Q. And both are lower, for the manufacturing cost both cylinders and fans are lower for 1906 than for 1911 proportionately?

A. Yes, sir.

Q. Now, how about commissions?

A. Commissions are higher. For the year 1911 the ratio of commissions to the cash part of the sales value was 31.85 and for 1906 it was 34.32. The fan in 1911 was 30.6 and it worked out for 1906 at 32.97.

Q. Now, your manufacturing cost and commissions for the year 1906 were obtained in exactly the same way by the same sort of calculations as you treated it for 1907?

A. Yes.

Q. The commercial and selling, the total you obtained

1055 from Exhibit 14 which is the yearly statement for this year, is it not?

A. 1906, yes. 1906 is Exhibit 14, yes.

Q. You worked that out by deducting commissions and interest on floating indebtedness, interest on bonds, insurance, taxes?

A. And second-hand repairs.

Q. And second-hand repairs. By the way, in 1906 what did you do with the second-hand repairs?

A. Oh, we left that in. We didn't deduct it.

Q. You have no second-hand account for 1906 at all, have you?

A. No, I show it separately here. I took it out of my first total of these commercial expenses.

Q. In proportion to gross sales?

A. With all the commercial expenses in proportion to gross sales. No, excuse me, I take that back. The repairs apportioned on the basis of the allowances to be consistent with what we did in the other years. I thought it was included, but it was treated separately.

Q. You kept out the repairs on second-hand scales and then divided those repairs for the year 1906 between cylinders and fans on the same proportion in which or according to which you divided the allowance account?

A. I did, yes.

Q. What was your total profit on cylinders before you deducted interest and losses?

A. $851.79.

Q. How much is that more than the profit given by Marwick, Mitchell, Peat & Company before deducting interest and losses?

A. $129.51 more. Our figure is $851.79 and theirs $722.28 on the same basis.

Q. What did you work out for that year the profit on fans before deducting interest and losses?

A. $47,936.24.

Q. What was your interest or what were your losses chargeable to fans for the year 1906?

A. Agents' losses?

Q. Well,——

A. Three per cent, $15,627.75 chargeable to the fan.

Q. And what did you charge to cylinder?

A. $172.80.

1056 Q. Now, your interest, what did you charge to cylinders?

A. 1906?

Q. 1906.

A. Yes, we charged interest; $17,904 to fans and $198 to cylinders.

Q. Now, what was your net profit for cylinders?

Mr. Meads: Of course, all that is shown by the exhibit, if your Honor please.

Mr. Zane: What exhibit?

Mr. Meads: Well, go ahead.

Mr. Zane: What exhibit? You have made a statement, what exhibit?

Mr. Meads: Why, the last exhibit, the last account he gave.

Mr. Zane: No, it is not in there at all.

Mr. Meads: All right.

A. The net profits on cylinders for the year 1906 as finally arrived at is $480.99.

Mr. Zane:

Q. And for fans?

A. $14,404.49.

Mr. Meads: Counsel asked what exhibit. It is the exhibit introduced at Toledo. In the last column it is all shown in the exhibit itself.

Mr. Zane: Yes, but you thought his working sheet was an exhibit when you spoke.

Mr. Meads: No, I didn't.

Mr. Zane: That's the reason why he hedged on it and could not say anything.

Q. We had finished, Mr. Seatree, with the year 1906. Now, go to the year 1908. You had a total for new scales sold which you got from Exhibit No. 12 of plaintiff by deducting the credits as before?

A. Yes, that's correct.

Q. And then you took the amount of cylinder sales from the Marwick, Mitchell, Peat & Company's account, Exhibit 40?

A. Yes.

Q. Where did you get the amount of fan scales?

A. By deducting the Marwick, Mitchell, Peat figure as representing cylinder from the total figure as shown by Plaintiff's Exhibit 12.

Q. Total figure for new sales?

A. New sales.

1057 Q. And where did you get the second-hand sales figure?

A. From page 2 of Plaintiff's Exhibit 12.

Q. Now, the charge-back account, the total, you took that from Exhibit 12?

A. Yes.

Q. The cylinder charge-backs you took from Marwick, Mitchell, Peat & Company's account, Exhibit 40?

A. Yes.

Q. Then fan charge-backs you got by deduction?

A. Yes.

Q. You apportion no part of the charge-backs to second-hand scales?

A. No.

Q. The total exchange scale account you obtained from Exhibit 12?

A. Yes.

Q. A mere matter of deduction?

A. Yes.

Q. And you pro-rated that on the basis of 1911?

A. As described yesterday afternoon, yes.

Q. Now, what do you find as to the exchange scales account? Was that lower proportionately in 1908 than it was in 1911?

A. Yes, for the year 1908 after having made this apportionment the ratio of allowances charged to cylinder scale business as measured by the gross sales, that is, expressed in a percentage, was 12.806 for 1908 as compared with 14.652 for 1911, and the fan scale relative percentage was 5.354 as compared with 6.125 for 1911.

Q. Now, your next item of expense was manufacturing cost. You got the total from Exhibit 12?

A. Yes.

Q. And you added to that total what?

A. Taxes $1,997.40, insurance $1,500, and deducted increase in inventory $24,704.75.

Q. And in that way you got your total manufacturing cost?

A. Yes.

Q. That you pro-rated as before on the basis of 1911?

A. In the manner described yesterday afternoon, yes.

Q. Now, what did you find for the manufacturing cost of second-hand scales? You apportioned no manufacturing cost to second-hand scales, did you?

1058 A. The second-hand scales or repossessed scales which were sold as new of course were included with the new, and in that way the cost was apportioned, but the second-hand scales which had come in as exchanges and been sold as second-hand, all the allowances made in respect to those second-hand scales were treated as an allowance or a reduction in price in the sale of the second-hand scales and pro-rated only to cylinder and fan.

Q. Yes.

A. And therefore there is no manufacturing cost to charge to the second-hand scales in respect of such items.

Q. As a matter of fact, in that year there were sold of second-hands $21,647.10?

A. That was the amount of the credit for the sales of second-hand scales shown in a separate account, yes.

Q. And you apportioned no manufacturing cost to that $21,000 worth of scales at all?

A. There being none to apportion.

Q. Well, you found a repair account, didn't you?

A. The repair account was charged for the year, that is, $1,013.57 was apportioned to the second-hand account.

Q. Now, what did you find as to the relative proportion of manufacturing cost in 1908 as compared with 1911?

A. For the year 1911 the ratio of cost to net sales was 22.7%. The relative ratio of cost to sales for the year 1908 as the result of my computation was 17.61 and as regards fan——

Q. Was the first cylinder?

A. Cylinder.

Q. Yes. You said sales, you didn't say clinders. All right, it applies to cylinders. Now, fans.

A. Fans, in 1911 the ratio of cost to net sales was 34.5 and for the year 1908 as a result of my computation it was 26.76.

Q. Your next item of deduction was commissions. You took the total from Exhibit 12?

A. Yes.

Q. And after you had reduced that as before you took your total commissions and pro-rated according to the method you have described for the year 1907?

A. Yes, sir.

Q. And it was pro-rated on the basis of what, of net or gross sales?

A. Of net sales after deducting the allowances prorated of
1059 cylinder and fan respectively for the purpose of reducing the amount to the equivalent portion of the sale for which cash was supposed to be collected either then or through installment notes, no commission being payable on the allowance part of the sale.

Q. You didn't reform the commission account in any way?

A. You mean the aggregate amount for the year?

Q. Yes, as shown by the books, you didn't reform that as between cylinders and fans?

A. I don't think so.

When you say reform it as between cylinders and fans, Mr. Zane, I don't just exactly understand what you mean.

Q. Wherever you had a cylinder and a fan sale together did you change the commission as shown by the books in any way in 1908?

A. No, sir.

Q. You could not have?

A. No.

Q. Because you only had a total?

A. Exactly.

Q. You didn't go into the details at all. It was arrived at, of course, automatically by the percentage figures I used for 1911, being arrived at after dividing the commissions in respect of split sales in the manner I described in my previous testimony.

Q. Did you find that the relative proportion of commissions to sales was lower or higher in 1908 than in 1911?

A. Higher. The ratio of commissions to what I have called the net billing value, meaning the cash value of the sales, in 1911 the ratio as to cylinder scale business is 31.85%, in 1908 it worked out 43.41; as regards fan scale business, in 1911 it was 30.6% and in 1908 it was 41.7%; second-hand scale business in the year 1911 was 28.38 and in 1908 it works out at 38.68.

Q. Now, let me get that correctly, as to fan it was for 1908 30.6?

A. That is 1911, 30.6, and for 1908 it is 41.7.

Q. Now, the second-hands.

A. For 1911 was 28.38 and for 1908 38.68.

Q. So that the commissions on second-hand scales in 1908 were higher than in 1911?

A. Yes, as far as the commissions on cylinder and fan they were higher in 1908 than they were in 1911.

1060 Q. Now, your commercial and selling expenses, you got your total from Exhibit 12, you made deductions as before?

A. Yes, for taxes, insurance, repairs, bond interest and other interest.

Q. And you apportioned on the gross sales basis?

A. On the gross sales basis.

Q. As between cylinder, fan and second-hand?

A. Yes.

Q. The next point you came to was your division of the second-hand scale receipts?

A. Yes.

Q. What was your total amount of second-hand sales?

A. The total amount of second-hand was $21,361.56, that was after deducting allowances. The total was $26,647.10, and there were allowances of $285.54, deduction on commissions $8,261.86, deduction on repairs $1,013.57, deduction and proportion of commercial and general expenses $4,298.20, leaving a net ratio of $7,787.93.

Q. And you pro-rated that between cylinders and fans on what basis?

A. On the basis that I charged the allowances to cylinders and fans, thereby giving a credit of $5,545.33 to cylinders and $2,342.60 to fans.

Q. That left you with a showing before deducting losses and interest of a profit of $51,439.79 on cylinders?

A. Yes.

Q. And $29,129.69 on fans?

A. Yes.

Q. You next deducted the losses?

A. Yes.

Q. Calculated as three per cent on the gross sales?

A. Yes.

Q. Of only cylinders and fans?

A. And second-hands.

Q. Well, you have already disposed of your second-hand account. Where do you work that in on the losses, let's see what you have.

A. I have first of all as regards cylinder 3% on the gross sales would be $13,781.18, and as regards fans $13,330.37.

Q. Yes.

A. I then had $649.41 as appertaining to the second-hand sales which I pro-rated to the cylinder and fan business on the
1061 basis of the allowances, charging $462.41 to cylinders and $187 to fans, making the total cylinder allowances $14,243.59 and the total fan allowances $13,517.37.

Q. Now, how did you find your investment in 1908, tell us what that was.

A. I assertained first of all the investment as of December 31, 1907, or January 1, 1908, which amounted to $459,359.32.

Q. How is that made up?

A. Preferred stock $230,300, common stock $300,000, bonds $100,000, floating debt $5,000, surplus $230,314.62, undivided profit $45,954.20, making a total of $911,568.82, from which I deducted the intangible value of $452,209.50.

Q. How are those intangible values made up?

A. $259,440.05 described as patents and $191,769.45 as organization, making a net investment in tangible assets of $459,359.32.

Q. And you took five per cent of that?

A. No, I didn't. I then added to that the additional average investment for the entire year of $92,459.15.

Q. Where did you get that?

A. The floating indebtedness was increased in February by $10,000, in March by $10,000, in April $30,000, in May $30,000, in

July by $25,000, September $15,000, December $25,000. The surplus and profits were increased in January $654.23, February $18.68, March $1,038.67, April $7,966.47, May it was reduced $4,619.07, June it was increased $2,272.63, July $7,672.36, August $6,847.02, September $16,833.90, October $7,279.23, November $8,246.58, December $18,374.91.

Q. Where did you get those monthly totals?

A. From corresponding monthly sheets to these. (Referring to Exhibits 9 to 15).

The average of the sum of those increases and floating debt and profits for the year reduced to the equivalent of the investment for the year was $92,459.15 which made a total average investment for the year 1908 of $551,818.47, 5% of which was $27,591, the amount which I apportioned.

Q. And you apportioned it on what basis?

A. On the basis of sales.

Q. Gross or net?

A. I think it was gross sales, yes, gross sales.

1062 Q. Now, in 1909 generally speaking you found your figures in the same way?

A. I did, yes.

Q. And the exhibits you used for the company's statement of business was Exhibit 11?

A. Yes.

Q. Now, in regard to exchange allowances in 1909 what did you find as to the relative proportion between 1909 and 1911?

A. As regards cylinder scale business as compared with 14.652, the ratio in 1911, the corresponding ratio for 1909 9.539; and as regards fan as compared with 6.125 the relative ratio for 1909 as I found it to be as a result of my computation was 3.988.

Q. Now, what did you find as to manufacturing cost?

A. You refer to the ratio?

Q. The ratio, the same question.

A. As compared with 22.7, the ratio of cost in 1911, I had the ratio of 16.56 for 1909 as the result of my computation, and as regards fan scales as compared with 34.5 I had a ratio of 25.17 as a result of my computation.

Q. What did you find as to the relative proportion on commissions?

A. As regards cylinder business as compared with 31.85% for the year 1911 I had 38.96 for 1909; as regards fan scale business as compared with 30.6 for 1911 I had a corresponding ratio of 37.43 for fan; and as regards second-hand as compared with the ratio of 28.38% for 1911 I have a ratio of 34.71% for 1909.

Q. Now, what was your average increase in investment?

A. I think it was a decrease that year.

Q. Well, very well, let us get at that. Give me the interest on investment — 1909, give me the items making up—Before going to the interest on investment account tell me what you did as to the second-hand charges. What did you charge against second-

hand sales in 1909? Give me your total second-hand sales and then what you charged against it.

A. Total sales for the year 1909 were $48,345.70 from which were deducted $475.04 as representing allowances. I also charged against it commissions amounting to $16,618.02, repairs $10,474.95, and commercial and general expenses $947.23, leaving a net
1063 salvage to be apportioned of $19,830.46.

Q. And you apportioned that how?

A. On the basis of the allowances chargeable to cylinder and fan scale business respectively.

Q. You having charged no part of the allowances against second-hand?

A. Yes, I charged $475.04 to second-hand.

Q. Well, how did you divide that $475.04 between cylinders and fans?

A. Well, it was merged in the net result of the second-hand business, of course I charged that against the second-hand sales as I said a few moments ago and came to a net salvage which I then apportioned back to cylinder and fan on the basis of the allowances which I charged to the cylinders and fans.

Q. Yes, but you are now apportioning the total second-hand sales between cylinders and fans. You say you apportioned that on the basis of the allowances charged, but a part of your allowances charged were to second-hand.

A. I am not apportioning the gross sales of the second-hand as you have just mentioned. I was apportioning the net salvage of the second-hand account.

Q. Yes.

A. Which is the gross sales after deducting the repair items and commissions, the proportion of allowances and the proportion of general expense, and I am left with a net salvage of $19,830.46 which I apportioned on the basis of the allowances chargeable to new cylinder scale business and new fan scale business respectively.

Q. Well, you had $19,830.46 to apportion?

A. Yes.

Q. What figure did you take for the apportionment to cylinders and how did you find that figure?

A. I took, expressed in a fraction, 57,757.21st—or express it the other way, $57,757.21—expressed in a fraction, it was $57,757.21

$82,304.19

Q. You divided on- figure into another. What figure was your divisor?

1064 A. Well, expressed in a fraction, it would be $19,830.46.

Q. Your divisor is $19,000?

A. No, I say expressed in a fraction $19,830.46——

Q. Can't you answer my question. What was your divisor, a figure, what was it, give me the figure.

A. Well, it just depends whether you divide or multiply first. As

I say, expressed in—or I mean to say, you can either figure it a percentage or a fraction.

Q. Well, give it a percentage. You found a percentage figure which you applied to this total to ascertain——

A. I divided $82,304.19.

Q. Where did you get that?

A. The sum of $57,757.21 and $24,546.98.

Q. Where did you get your $57,757.21?

A. That is the proportion of the allowances which I had charged to the cylinder scale business, and the $24,546.98 is the proportion of the allowances I had charged to the fan scale business.

Q. You totaled the two and then you divided that total into what?

A. Into $19,830.46.

Q. Yes.

A. And then multiplied the resultant percentage.

Q. What did you get, what per cent?

A. I have not got the figure preserved. I don't know any more.

Q. The point I am trying to get at with you is this. You had apportioned allowances to cylinders $57,757.21, you have answered that.

A. Yes.

Q. You had apportioned to fan $24,546.98?

A. I did.

Q. And you say you added those two together?

A. I did.

Q. Using that as a divisor in order to find your precentages, but where do you get your figure $19,830.46?

A. By deducting from the sales of second-hand scales, which was $48,345.70, the following items: $475.04 allowances, $16,618.02 commissions, $10,474.95 repairs, $947.23 commercial expenses. I should draw attention to the reversed figures here. Where
1065 I have described the repairs as $10,474.95 and the commercial expenses as $947.23 it should be just reversed, the repairs are $947.23 and the expenses are $10,474.95. They happen to be on the wrong line here.

Q. Well, you divided $82,304.19 into $19,830.46, what did you get?

A. I have not preserved the answer to that calculation. I would be glad to make it now if you wish it made.

Q. When you got your percentage figure what did you do?

A. I multiplied it by $57,757.21 to ascertain the amount of that second-hand salvage to be credited to the cylinder business.

Q. Why could not you say that without going through all this performance? What you did was to take the amount of second-hand net sales and divide that between cylinders and fans in the proportion that the sales of cylinders and fans bore to each other, that's what you did, was it not?

A. Not in the proportion that the sales of cylinders and fans bore to each other, no.

Q. How did you do it, describe it in words.

A. I ascertained the net salvage of the second-hand account in the manner described.

Q. Yes.

A. And I apportioned it between cylinder scale business and fan scale business in the proportion that the charges for allowances to cylinder and fan scale business respectively bore to each other; it's in the proportion of the allowances and not in the proportion of the sales.

Q. Well, then, you had an addition to make to your cylinder allowances of how much?

A. I didn't have an addition to make to the cylinder allowances. I had a credit to make to the cylinder scale business of $13,916.08 and a credit to the fan scale business of $5,914.38.

Q. Then what did you do?

A. Found the profit on the cylinder and fan scale business respectively. Do you want me to give them?

Q. Now, you have a figure of $19,830.46 to apportion?

A. That was the apportionment I have given you.

1066 Q. Now, you have apportioned it on some basis, and do you mean to say that you apportioned that $19,830.46 on the basis of $13,916.08 and $5,914.38?

A. No, I mean to say that that is the apportionment of the $19,830.46.

Q. Yes, that is the apportionment?

A. Yes.

Q. Now, on what figures did you apportion?

A. I just told you on the apportionment, on the basis of the allowances.

Q. Give me the figures.

A. $57,757.21, being the allowances charged to the cylinder scale business, and $24,546.98, charged to the fan scale business.

Q. Now, if you have apportioned it in that figure, don't you see you have apportioned it on the basis of allowances without making any provision for apportioning the allowances on second-hand, don't you see that?

A. I understand entirely that for the purposes of that apportionment I disregarded the allowances charged to second-hand scale business.

Q. Why could not you say so?

A. If you had asked me, I would.

Q. I asked on what basis you apportioned and how you got rid of your second-hand allowances, that's the question you were asked and that's the one you didn't answer. So you disregarded in apportioning the allowances on second-hand sales, that's what you did?

A. For the purpose of apportioning back to the new cylinder and new fan the net salvage of the second-hand I disregarded the allowances charged to the second-hand business. I apportioned it on the allowances charged to the new cylinder and new fan respectively.

Q. Now, in order to apportion that exactly, you ought to have taken in your second-hand allowances and proportioned them between cylinders and fans, had you not?

A. I don't think so, not according to my theory.

Q. Now, we will go to interest on investment. Give me the items making up your total for investment this year.

A. That's the year 1909?

Q. This is 1909.

1067 A. To ascertain the investment at December 31, 1908, which would be the same as January 1, 1909, by taking the preferred stock, $230,300, the common stock $300,000, the bonds $100,000, floating debit $150,000, surplus $273,697.60, the undivided profit $75,156.83, making a total of $1,128,854.43, from which I deducted the intangible values of $452,209.50.

Q. How was that made up?

A. In exactly the same manner as the previous year.

Q. That is, patents so much and organization so much?

A. Yes.

Q. And you got what?

A. $676,644.93.

Q. Did you have any average increase or decrease this year?

A. I had an average decrease of $42,350.67.

Q. You say you footed that list of items up to $1,128,854.43?

A. There is apparently a $10,000 error in there I notice now which however must be balanced because I balanced it with the net assets. Some one of the figures I gave you is wrong. I will have to look it up again. The figure is $1,128,854.54 there, is it not?

Q. Give us your preferred stock again, was it $230,300?

A. $230,000.

Q. Don't you see your addition is $300 off?

A. Yes, there is a difference of $300 there.

Q. Well, there is an error then of $300?

A. Wait a minute. I think there is an offset in there because it balances here.

Q. Well, Mr. Seatree, the $300 is not of importance.

A. There is a compensating error of the same amount.

Q. Well, you balance by a compensating error. All right, we will go on to something else. You gave me your average decrease.

A. The next figure I used is right there, the decrease is $42,-350.67.

Q. And your net figure then?

A. $634,594.26.

Q. Now, let's go to the year 1910. Your exchange allowances, were they proportionately lower or higher in 1910 than in 1911?

1068 A. For the year 1910 the ratio of allowances as the result of my computation in respect to cylinder scale business was 9.96 as compared with 14.652 in 1911, and for fan scale business 4.16 as compared with 6.125 for the year 1911.

Q. Now, in 1910 your percentage was 9.96, in 1911 your percentage was 14 and what?

A. .651.

Q. And those percentages were both for cylinders?

A. Yes.

Q. Now, for fans for 1910 what was your per cent?

A. 4.16 as compared with 6.125.

Q. Now, your next item of deduction would be manufacturing cost. How did that compare on the basis of your ratio with 1911?

A. The ratio of cost for the year 1911 as to cylinder scale business was 22.7, it was 21.33 as the result of my computation for the year 1910; as regards fan scale business for the year 1911 it was 34.5 and as the result of my computation for the year 1910 it was 32.42.

Q. How about commissions?

A. For the year 1911 the ratio of commissions to cylinder scale business as found by analysis was 31.85, for the year 1910 the corresponding ratio as the result of my computation was 34.83; in respect to fan scale business it was 30.6 in the year 1911 as compared with 33.47 resulting from my computation for the year 1910; and second-hand was 28.38% in the year 1911 and the result of my computation for the year 1910 was 31.04.

Q. Now, give me the items of investment. Before going to that let us get your second-hand account.

A. For the year 1910?

Q. 1910, how you get a balance on that.

A. The gross sales of the second-hand business $92,107.79, the allowances charged on second-hand scale sales was $944.76, refinishing expense $10,573.74, commissions $28,298.75, commercial expenses $23,212.25, freight inbound $2,812.17, and there was a credit for repair account of $627.72, leaving a net salvage to be apportioned of $26,893.84. Of that amount I credited $21,055.16 to the cylinder scale business and $5,838.68 to fan as apportioned on the basis of the allowances chargeable to new cylinder and new fan scale business respectively.

1069 Q. Now, interest on investment, preferred?

A. $295,300.

Q. Common?

A. $300,000, bonds $35,000, floating debt $300,000, surplus $100,225.99, undivided profits $148,377.70, making a total of $1,178,903.69, from which I deducted $259,440.05.

Q. For what?

A. Described as patents.

Q. What had become of the organization expense?

Q. I think it had been written off in the meantime. You see the amount of surplus is reduced making a net figure of $919,463.64 to which I added an average increase in the investment for the year of $92,214.59, making the total investment for the year 1910 $1,011,678.23. From that I deducted investment in the Canadian business $45,786.02, leaving net the figure of $965,892.21 which I called $950,000.

Q. How did you get your average increased investment?

A. There was an increase of $145,000 in the floating indebtedness, $25,000 in the month of January, $20,000 in the month of February, $25,000 in the month of April, $25,000 in the month of June and $50,000 in the month of December.

Q. Is that all?

A. That makes $145,000, does it not?

Q. You have not got a single figure over $50,000. How did you get it up to $145,000?

A. 25, 20, 25, 25 and 50, that's $145,000 on the floating debt.

Q. Well, January 1, 1909, you had——

A. You are taking the year 1910, are you not?

Q. —you had floating debt of how much?

A. January 1, 1909, of $150,000.

Q. Yes.

A. And January 1, 1910, I had a floating debt of $300,000 and during the year 1910 it was increased from $300,000 to $445,000.

Q. Now, January 1, 1911, what was your floating debt?

A. $445,000.

Q. Now, in this year 1910 appears that Canadian item for the first time. How was that made up, where did you find it, what exhibit are you using?

1070 A. At the present time I am looking at——

Q. Is that Exhibit 10 for the year 1910?

A. That's Exhibit 11.

Q. Exhibit 10 is 1910, is it not?

A. Exhibit 10 is 1910.

Q. Yes. That Canadian item has appeared. Now, tell us where you got it and what it is.

A. It's firstly materials and equipment or scales and equipment rather, $27,085 scales and $701.02 equipment, making $27,786.02, and that is the investment on January 1, 1909, taken from——

Q. No, January 1, 1909, is it not?

A. It is the same thing, but it is taken from the December 31, 1909, statement and then the receivables were estimated at $18,000.

Q. $18,000, where did you get that estimate?

A. I think, as I recall it, I took the percentage that the receivables were for the year 1911, the Canadian sales as I had previously determined them from information I then had as to what the actual receivables were, and in the absence of the details at December 31, 1909, and 1910, I used a corresponding ratio to that for the year 1911. As I say, I had $45,000 estimated at that time from an examination of the accounts and the corresponding figures I had at December 31, 1910, and December 31, 1909, that is $35,000 and $18,000 respectively. Then in case there might be a possibility of an under or over estimate of that amount, when I gave the net figure of $965,892.21 I reduced it to $950,000, which in fact was a further deduction of $15,892.21, as being available, to be regarded if necessary as part of the Canadian investment.

Q. Who gave you the information about the Canadian receivables?

A. At the time I was in Toledo on the 1911 account I went into them myself in conjunction with Mr. Zolg and at that time I ascertained that the receivables at that date, December 31, 1911, were, as near as I could figure it, $45,000.

Q. What was your total Canadian item?

A. The item, specific Canadian item for that particular year, that is to say, on January 1, 1910, was $45,786.02 with the addi-

tional available item to be regarded as Canadian if necessary of $15,892.21.

1071 Q. Now, the year 1912 for eight months, take your allowances first.

A. The ratios I suppose?

Q. Give the ratios with regard to 1911.

A. In respect to cylinder scale business the ratio of allowances to cylinder scales as a result of the analysis made for the year 1911 was 14.652% and the amount resulting from my computation for the year 1912 as based on the 1911 experience was 13.594; as regards fan scale business the corresponding ratios for the year 1911 were 6.125 and for the eight months of 1912 5.683.

Q. Second-hand?

A. I didn't actually figure the ratios out for the year 1912. The ratio of allowances to second-hand business for the year 1911 is 1.5 and the corresponding figure for the year 1912 approximately 1.4.

Q. Manufacturing cost, give us the comparative rations.

A. For the year 1911 as regards cylinder business it is 22.7, for the period of 1912, based on my computation, is 19.94%; as regards fan scale business, for the year 1911 it is 34.5, and the corresponding ratio for the eight months period of 1912 is 30.31.

Q. Second-hand?

A. There is no manufacturing cost on that other than the repair item which I will give you.

Q. Well, we will come to that when we take the second-hand account.

A. I can tell it, the cylinder cost was $10,045.20.

Q. Now, take the commissions, give us the relative proportions of the commissions.

A. The ratio for the year 1911 as based on the analysis made was 31.85% as regards cylinder scale business, and the relative ratio as based on my computation for the eight months of 1912 was 32.57%.

Q. How about the second-hand commissions.

A. As regards fan it was 30.6% for the year 1911 and 31.29% for the eight months of 1912; cylinder scale business was 28.38% in 1911 and 29.02% for the period of eight months in 1912.

Q. Now, give us your second-hand account in 1912 for eight months.

A. The gross sales were $95,170.80, the charge backs were $9,298.50—that was a debit. The allowances were $1,332.48, the refinishing expense was $1,045.20, the commissions were

1072 $24,537.23, freight inbound on scales was $2,800.82 and the commercial and selling expenses were $26,322.24. The net salvage on the second-hand business for that period was $20,834.33 which I distributed as between cylinder and fan scale business as follows: to Canadian cylinder scale business $16,201.16, and to the Canadian fan scale business 4,633.17, that apportionment being based upon the charges to the new cylinder and new fan scale business respectively for allowances.

Q. Now, interest on investment.

A. Up to January 1, 1912, or December 31, 1911, the preferred

stock was $316,200, the common stock was $300,000, the outstanding bonds were $35,000, the floating indebtedness was $445,000, the surplus was $250,000, and the undivided profits were $49,791.22, making a total of $1,395,991.22, from which I deducted intangible values of $250,000.

Q. What's that called in the statement?

A. Patents.

Q. Was there anything in the statement for good will?

A. I don't think in any place in these statements it is called anything but patents.

Q. Very well.

A. That made $1,145,991.22, and the increase on the average investment for the eight months was $13,222.21, making the average investment for the eight months $1,159,213.43, from which I deducted Canadian business investment, materials and equipment, $70,576.86, receivables $45,000, and vulcanizer business $3,865.63, making a total deduction of $119,442.49, leaving $1,039,870.94, which I called $1,000,000, thereby leaving available as a margin for under estimate of the Canadian and vulcanizer business of $39,870.94.

Q. Now, the result of your computations in this way you have included in Defendant's Exhibit 61?

A. Yes, sir, I have.

Q. In Defendant's Exhibit 61 the percentage figures are all in red, are they?

A. They are supposed to be, I think they are.

Q. And the statement on that sheet "Red figures denote losses" has no application to percentages?

A. No. In reply to the first question, the question about all the percentage figures being in red, I would like to correct that to the extent that the percentages in the years 1910, -11 and -12
1073 relating to the fan scale profits under the heading "As computed by Marwick, Mitchell, Peat & Company," they are in purple I suppose you would call it rather than red because in those cases they were losses, just to distinguish that, the ratio as expressed in black meaning in that case losses because the amounts were losses. It was simply to bring out the contrast between profits and losses in amount. We used red figures for losses and black figures for profits, and in percentage just reversed the color to bring them out more clearly, that's all.

I would like to put this in the record: "Red figures denote losses" in Defendant's Exhibit 61 should read "In amount columns as distinguished from percentage columns red figures denote losses."

Q. Then your statement at the head of this Defendant's Exhibit 61 which is entitled "Statement of profits by years from January 1, 1906, to August 31, 1912, divided as between cylinder and fan scale business and exclusive of profits from Canadian and vulcanizer business," that means divided as you have heretofore testified?

A. Exactly.

Q. And on no other basis at all?

A. No other basis at all but what I have testified to.

Q. And you mean by as you have heretofore testified as you have testified in this last examination of yours?
A. That is to say, at Toledo and here in Chicago?
Q. Yes.
A. Yes.

(Record read at request of witness.)

The Witness: To make that clear, I would like to state that the year 1911 of course is based on the testimony previously given, being the result of the analytical work that we did, and the other years are I might say founded on the experience of that year but computed in the manner to which I testified at Toledo last week and in Chicago yesterday and today.

Q. Now, for the year 1911 your original account for that year was based upon the proposition that all of the repossessed scales were sold as second-hand?
A. The original was, yes.
Q. Yes. Now, let us take what you have stated in this Exhibit 61 of defendant for the year 1911, what would be your gross sales of cylinders taken from the statement, give us your gross sales
1074 of cylinders as you have obtained it for the other years; you obtained that from the Marwick, Mitchell, Peat report, didn't you, for the other years?
A. Yes.
Q. Your gross sales of cylinders from their report?
A. The gross sales as shown by their report for the year 1911, that is to say, Plaintiff's Exhibit 40, would be $803,657.26.
Q. Now, in the other years you obtained your fan sales by deducting from the total sales or by deducting from new sales the cylinder?
A. Yes.
Q. Cylinder sales?
A. Yes.
Q. What are the total sales of new sales in the yearly statement for the year 1911—what exhibit are you using by the way?
A. Plaintiff's Exhibit No. 8 I am going to use, the figure of new scales sold on Plaintiff's Exhibit No. 8 including the foreign scales sold would be $1,317,526.97.
Q. And that would leave new fan sales of how much according to your method for the other years?
A. $513,869.71.
Q. Your second-hand sales taken from the Exhibit 8 total second-hand sales?
A. Including refinished scales of course I suppose you mean?
Q. Yes.
A. Would be $94,820.35.
Q. Now, your allowances would be of course on your basis for 1911. The manufacturing cost is on your basis for 1911, carrying it out in the same way you did for the other years?
A. Yes, that would be true.

Q. Commissions are divided by you for the other years on what basis?

A. I want to correct that statement where I say "yes, that would be true." I don't exactly understand what you mean. If you want to know what I did for the year 1911, it does not conform with what would appear as to what I did from that question and answer.

1075 Q. Oh, there is no catch about the question at all, Mr. Seatree. It only means this, that you have worked out in your former account for 1911 a division of allowances and a division of manufacturing cost?

A. Yes.

Q. That division you apply back through the other years and in 1912?

A. Yes.

Q. But now we are coming to commissions.

A. Yes.

Q. For the other years you didn't divide them on the ratios of 1911, you proceeded on another basis. Now, just state for the purposes of the record what it was. First, in 1907 how did you divide commissions as between cylinders, fans and second-hand?

A. I applied exactly the same principle as other years in regard to all of those three classes of items, allowances, manufacturing cost and commissions, I didn't change the principle that I applied in respect to any of them, I applied exactly the same principle to each for the other years. What I did in each case was to find what the allowances, what the cost and what the commission would be in each of the other years on the same ratios that those items carried in the year 1911 and then I apportioned the actual outlays under those three headings for the respective years on the basis of what they would be on the 1911 ratios.

Q. So you divided your commissions for the other years on the 1911 basis?

A. I did, that is to say, preserving—When I say I did it on the 1911 basis I preserved the ratio in the differential.

Q. Your total for commissions in the year 1911 does not agree with the total for commissions in the yearly statement, does it?

A. No, it was slightly adjusted.

Q. It was adjusted?

A. In other words, it agrees with the books but it does not agree with the balances as appear in the commission account, the balance as appearing in the commission account was adjusted in respect of certain transfers.

Q. Does not the yearly statement show the total of commissions as that total appears in the books?

A. I assume it does.

Q. Yes. Now, your total for commissions does not agree with the total in the yearly statement?

1076 A. With the balance appearing in the yearly statement for the year 1911, no, it would not.

Q. The next item is commercial and selling. You divided that on your account for the year 1911 on what basis?

A. On the basis of gross sales.

Q. And you continued that through your other years?

A. Yes.

Q. You didn't apply your ratio for 1911 to commercial and selling in the other years?

A. It was not necessary, no.

Q. Well, you didn't as a matter of fact?

A. No, I just found what it was on the total sales and apportion it om the total sales.

Q. Now, your second-hand account for 1911, have you reconstructed that on a new basis of considering all repossessed scales sold as new scales?

A. Yes, I have effected the adjustments as set forth in Defendant's Exhibit 26 which I applied to Defendant's Exhibit 21, recasting it to give effect to those adjustments and also to give effect to the apportionment of the net salvage as between the allowance charges for the reason that I made that uniform throughout.

Q. Now, turn to your Exhibit 21 where your second-hand account appears, when that account is recast what is your first figure there, $111,651.34?

A. $105,215.85.

Q. How do you make that up?

A. By deducting from $111,651.34 the sum of $6,435.49 as shown on Defendant's Exhibit 26.

Q. And that was for what?

A. For the items of sales which I transferred back to new cylinder and new fan respectively.

Q. Sales of what?

A. Of scales which were treated by Marwick, Mitchell, as I understand it, as new scale sales as regards cylinder.

Q. Then your next figure?

A. $3,273, being the same figure that is deducted on page 1 of Exhibit 21 in respect to charge-backs.

Q. Then what does your next figure become?

A. $101,942.85 instead of $108,378.34.

Q. Now, your next figure in the account, does that remain the same?

1077 A. That remains the same, all the allowances remain the same. I get the sum of $1,588.09 which is the same as I had originally.

Q. Then what does your next figure become?

A $100,354.76.

Q Then turning over to page 2, continuing in your second-hand account, you have at the top of the page $100,354.76, have you?

A. Yes.

Q. That's what you carried over?

A. Well, I didn't carry it over, but it is the same figure.

Q. Then your next figure of $16,480.30 you take out?

A. Yes.

Q. Now then, on your account stated in that way what do you figure the loss to be?

A. There are some changes in the details.

Q. Well, let us see what the changes in the details are.

A. The assumed cost of repossessed scales, or rather, put it the estimated cost of repossessed scales which was assumed as being old as second-hand in the first place was transferred back, that was $36,-435.27. That is the proportion of the figure which appears on page 1.

Q. Taking this debit column on page 1, what figure do you leave instead of the first figure that appears in the debit column $37,-315.25?

A. $879.98, that is the inventory valuation of second-hand scales.

Q. What is your next figure in that column, does it remain the same?

A. It remains the same.

Q. That is $24,068.34?

A. $24,068.34.

Q. Your next figure in that debit column of second-hand scales?

A. $28,479.39 instead of $28,683.95. There is a difference there of $313.15.

Q. What's that taken out for?

A. That is the commission on the fan scales that were transferred which were included in the $28,683.95.

Q. What is your next figure in that debit column?

A. I might say that in the first figure I gave you of $28,479.39 that included the item of $108.59 so it corresponded with the sum of those two.

Q. $108.59 is included in the $28,479.39?

A. Yes.

1078 Q. What is your next figure in the column?

A. Commercial expenses.

Q. How much?

A. $29,709.85.

Q. Well, do you take out the figure $3,374.09?

A. For the purposes of this computation, yes, because I dealt with the results before deducting that in the first instance.

Q. That's taken out?

A. Yes.

Q. Now, instead of the commercial and selling of $31,547.78 you have what?

A. $29,709.85.

Q. Have you any further figure in the detail column?

A. No, there is a small credit item that takes the place of $16,-480.30, there is a forfeited installment there that relates to second-hand sales of $183, so instead of $16,480.30 we have $183.

Q. That's in the credit column?

A. That's in the credit column.

Q. Well, $183 and how much?

A. I think it is $183 even; $183 even. That makes the net salvage on that basis $17,400.20.

Q. That's a gain?

A. That's a net salvage, yes, of $17,400.20.

Q. Instead of a loss——

A. On the other basis of——

Q. $1,827.45?

A. Yes, and I apportioned that $17,400.20 on the basis of the allowances charged against second-hand scales in order to make it uniform with the other years, and I credited to cylinder business $13,694.74 and to fan business $3,705.46.

Q. Now, this latter division is adopted instead of your apportioning loss or gain on the unit basis?

A. Yes, because we have not the units contributed for the other years, so I thought I would follow the method of distributing it on the basis of the allowances which had been charged against the new cylinder and new fan scale business respectively, although I might add here that I don't think the present basis is as equitable as the other one, but inasmuch as I had not the information available as to the units contributed, I apportioned it on the basis of the allowances charged.

Q. You considered the unit basis more equitable?

1079 A. As regards the division of the salvage. When I say unit basis I refer to a specific kind of unit basis, and that is the unit basis being the number of the scales taken in on exchange, in other words, out of a large number of units coming in there is a determined salvage.

Q. Well, the unit basis is a division in proportion to a certain number of scales coming in from different sources?

A. On exchanges.

Q. Now, for the year 1911, according to Defendant's Exhibit 61, the total net profit for the year 1911 was what?

A. Do you mean before or after deducting losses on agents' accounts and interest on investment?

Q. Before.

A. $37,812.41.

Q. Where do you find that? I said total profit.

A. Oh, excuse me, I didn't understand, I thought you meant the cylinder.

(Question read at request of witness.)

Before deducting losses on agents' accounts and interest on investment and exclusive of the Canadian business and the vulcanizer business, the profits for the year 1911 were $41,110.98.

Q. Now, what is shown as the total profit on the yearly statement of the defendant for that year, what does it give for the profit?

A. It shows a total profit of $43,765.73.

Q. And that yearly statement is after deducting certain interest charges, is it not?

A. Yes.

Q. Now, how do you reconcile your total net profit of $41,110.98 with the yearly statement of profit on the books or on the yearly statement, $43,765.73, how do you reconcile those two?

A. I can reconcile it on the point of the books. In the year 1911,

as in the other years to which I referred in my testimony at Toledo last week, there were entries put on the books in the final closing after these tentative monthly statements for the twelve months were compiled and the profit, as shown by the books, instead of being $43,765.73, was $33,276.25, that was the final net profit. Now, the reconciliation of the $33,276.25 as shown by the books with the sum of $41,110.98 is made up as follows: First of all add back
1080 amount of interest paid on borrowed money which was deducted in arriving at the $33,276.25.

Q. Yes.

A. The amount of your interest is $28,432.90, that would make the total profits before interest $61,709.15. Of that profit $24,080.32 came from the Canadian business, $1,292.71 came from royalties, and there was a loss on the vulcanizer business which you would figure the other way of $4,774.86, making a net profit of $61,709.15 contributed from these other sources. If $20,598.17 were deducted from the $61,709.15, it leaves the profit that I have shown of $41,110.98.

Q. Now, have you anything to show how the $43,765.73 of profit was reduced, as you say, by final entries on the books to $33,276.25?

A. I have not because for the year 1911 we worked from the books and not from that statement.

Q. So you can't tell us how you reconcile by changes on the books the $43,765.73 of profit with the $33,276.25 of profit?

A. Not without going to the books to get the information.

Mr. Zane: I think that's all.

Redirect examination.

By Mr. Meads:

Q. Mr. Seatree, just a question: In answer to various questions put to you by counsel for the plaintiff you said that the commissions for the year 1911 do not, as shown by your Exhibit 21, agree with the books. Do you mean the books or any particular book?

A. I corrected that and I said they agree with the books, but they don't agree with the balance that appears in the particular commission account for the reasons that items were included in the commission account, the balance of which was a certain figure in respect of which we made adjustments to put them to their proper account, as testified to in our testimony, and consequently the figure of commissions we used was the actual commission that remained after making those few slight adjustments.

Q. Those adjustments were made by you from the books?

A. Yes, sir.

1081 Recross-examination.

By Mr. Zane:

Q. The differences are shown on a certain page of your Exhibit 22, are they not?

A. They are, yes, sir.
Q. And what is that page?
A. Page 10.
Q. And the difference is what?
A. The difference on that page is $8,517.39, but that includes $7,603.54 of commissions on forfeited installments which in the final closing was transferred back or the major portion of it was transferred back, so the real net difference between the books and our final figure was approximately $1,000.

Mr. Meads: You say "Books," Mr. Seatree.
A. I mean the balance of the account.
Mr. Meads: You mean the balance?
A. Yes.

Mr. Zane: That's all.

GEORGE R. FRYE resumed the stand for further examination and testified as follows:

Direct examination continued.

By Mr. Hibben:

Pending question read as follows:
"Will you please state briefly and in only such detail as may be necessary for the purpose of this case what the construction and invention are disclosed in this patent?

"Mr. Zane: : We want our objection to that, your Honor.
"The Master: I will take the testimony subject to the objection.

"A. This patent 839,736 discloses an arrangement whereby the base for setting a scale on a shelf or table, and so forth, supports a lever or scale beam which is mounted on the base and carries inwardly of the fulcrum pivots a platform upon which commodities are to be placed, the rear end of the lever or scale beam extends into a housing in which housing is mounted a cylinder bearing weight and price computations, connections being made for rotating the cylinder from the scale beam during the weighing operation. The scale beam is also connected with some mechanism for offsetting the load, placed upon the platorm. The invention as claimed
1082 covers the arrangement of the several elements I have mentioned whereby——

"Mr. Zane: We object to this statement as a construction of the patent. That is an opinion in regard to a matter of law and it has been ruled that the witness cannot give the construction of the patent, construction of the claims.
"That's a matter of law for the Master himself.
"The Master: What were you starting out to describe?
"A. The invention as claimed.
"The Master: Construing you mean the claims of the patent?

"A. Why, as far as the claims cover the construction disclosed and embodied.

"(Discussion.)

"The Master: I will sustain the objection to that question.

"Mr. Hibben:

"Q. Will you please examine this patent, Exhibit No. 37, and state briefly the construction and mode of operation of the machine or device set forth therein?

"Mr. Zane: We object to that because that calls for a double conclusion. He is first asked to put his construction upon the patent and then he is asked to describe the machine that is described in the patent. They have got a machine here. If the witness is competent, he could testify I take it as to the machine, the way it operates. Then if he goes on to say these different things are covered by such and such claims in the patent, that's a different thing, but what he is asked now is the same thing over again.

"The Master: Unless there is some difference in the rules of evidence between patent cases and other cases, it does not seem to me that's a competent question. I think that the witness's attention may be called to the claims in a patent and that then he may point out in the claims, if he can, the structure that those claims relate to.

"Mr. Hibben: It is opinion evidence, if your Honor please, and it is most common, ordinary practice, it is elementary amongst patent attorneys they always describe what the construction of the patent is, and the next question is to apply that to the alleged infringing machine or some other machine, this kind of evidence has always been sustained as competent so far as I have ever known, but I recognize of course the doctrine that an expert witness cannot interpret the claim.

1083 "The Master: That's what it seems to me that question calls for.

"Mr. Hibben: Not the legal effect.

"The Master: He is asked to interpret this language that is not expressed in technical terms.

"Mr. Hibben : I am not asking a legal opinion by this question. I am asking him to describe the construction or mode of operation of that machine.

"(Question read.)

"The Master: Objection sustained. That asks him, as I understand it, to interpret what the language means in that patent, that is to say, this language means a certain kind of a machine. Now, the language is not technical, it is plain, the court can tell what it describes. A patent is written for the information of everybody. Now, it seems to me that the witness has a right to point out in the structure itself the points as he understands it that are covered by the patent.

"Mr. Hibben: I will amend the question: As described in the specifications and illustrated in the drawings.

"Mr. Zane: He ought to begin the other way, he ought to begin with the machine.

"The Master: What I mean to hold is that I do not think it competent for this witness to interpret language, that the court always should construe a written instrument and tell what that written instrument itself means. Objection sustained.

"Mr. Hibben:

"Q. Will you please compare this patent No. 839,736 with the cylinder scales involved in this accounting and as disclosed by the record herein and state whether you find embodied therein substantially the same construction and mode of operation of machine as described and illustrated in this patent.

"Mr. Zane: We object to that question, that's worse than the others.

"The Master: I don't know about that, Mr. Zane. That asks him to describe a machine or a part of a machine.

"(Question read.)

"Mr. Zane: The point I object to is this: The first thing your attention is directed to is a patent, a written document. Now, he is asked to compare that written document with cylinder scales involved in this accounting and disclosed by the record herein.
1084 The witness is to put his construction on that and say what he thinks it is and so on and so forth. The point comes back to this, if they are drawing his attention to a machine, they must draw his attention to the machine in evidence or some of them. Then, if he is going to make comparisons, he makes comparisons with another mechanism, but if he goes on to say that that is covered or is the machine in this invention, he is passing upon and construing the invention.

"The Master: There are two machines that have already been introduced in evidence and are now present and subject to examination by the witness. I assume that the question in referring to the record intends to confine the witness to the machines present before the Master.

"Mr. Hibben: There was also introduced in evidence a lot of photographic reproductions and Mr. Reeves also testified as to certain modifications, so that the question must necessarily be based on Mr. Reeves' testimony and all the exhibits which were offered in evidence at that time. Of course, it is going to develop the witness will use as far as he can that form of scale, but there were other scales.

"The Master: If you have cuts of them here that are in evidence.

"Mr. Hibben: These are all in evidence.

"The Master: I think he has a right to examine them and use them.

"Mr. Hibben: That's what he is supposed to do.

"Mr. Zane: There are other scales in evidence in this case that are not now in evidence at all.

"The Master: Well, there are two here and there are cuts here of other scales. So far as there are other scales and cuts of other scales or parts in the record, I think the witness has a right to examine them and compare them with the patent.

"Mr. Zane: It is confined to the defendant's scales, I suppose, is that the question now?

"The Master: The defendant's? Well, it is confined to any scale or any cuts of scales that are now in evidence that are supposed to contain or that they claim contain any of the patented elements in the patented scale that they are offering in evidence.

"Mr. Zane: You see the complainant's scales are in evidence in the case.

"The Master: I don't think he should be required to examine all of them. I think if he examines any of them that are in evidence, on cross examination you can call his attention to the com-
1085 plainant's scales. We will take his answer and if he gets outside of these cuts, why make your objection.

"(Pending question read as follows: Will you please compare this patent No. 839,736 with the cylinder scales involved in this accounting and as disclosed by the record herein and state whether you find embodied therein substantially the same construction and mode of operation of machine as described and illustrated in this patent.)

"Mr. Zane: That's the one we object to as calling for something not expert evidence at all.

"The Master: Yes. Objection overruled. It may be understood that all of this testimony goes in subject to the objection.

"A. In all of the scales that I have examined I find the following elements which are described in the patent 839,736; The base supporting a lever or scale beam which scale beam carries inwardly of the fulcrum pivots a platform adapted to receive the commodity to be weighed and a cylinder mounted in a casing which receives the rear end of the scale lever or beam, the connection for driving the cylinder being from the scale beam, also a load counter-balancing mechanism for offsetting the weight in the load placed upon the platform, the arrangement being such that when a commodity is placed on a platform the weight thereof depresses the scale beam so as to actuate the load counter-balancing mechanism and the cylinder indicating mechanism so that the weight of the commodity will be exhibited through slots in the housing surrounding the cylinder above and to the rear of the platform itself. These several elements are included in all of the cylinder scales in exhibit in this case that I have had occasion to examine.

"Mr. Hibben:

"Q. Will you please state what particular exhibits you have examined to which you referred in your last answer?

"A. I have examined the machines in this room one of which is marked Defendant's Exhibit 55 and the other of which—I don't remember the number.

"Q. Go and look at it.

"A. Well, it is marked Complainant's Exhibit Defendant's Scale. I have also examined the exhibits numbered Defendant's Exhibits 50, 51, 52, 53, 54, 56, 57 and 58 which are cuts showing various types of cylinder scales.

"Q. Now, will you please examine the claims of this patent
1086 No. 839,736, Exhibit No. 37, and state whether you find embodied in any of these cylinder scales which you have thus examined the structure set forth in any one or more of such claims?

"Mr. Zane: Your Honor, that's a repetition of the question that has been ruled out.

"The Master: Objection overruled.

"A. I find that the first claim includes the elements enumerated above, for example, 'in computing scales, the combination of a supporting base,' this base is shown in the patent and in all of the exhibits examined. 'A scale-beam pivoted at or near one of its ends on said base,' this scale beam is shown in all of the exhibits examined; 'a platform pivotally mounted upon said beam inwardly beyond the latter's pivot,' this platform is shown and mounted as herein described in all of the exhibits examined; 'a substantially cylindrical casing mounted at an elevated position in rear of the platform over the rear end of the scale-beam and transverse thereto,' all of the exhibits examined show the cylindrical casing mounted as described.

"Mr. Zane: Transverse thereto?

"A. Transversely thereto.

"Said cylindrical casing being apertured in the side toward said platform above the plane of the top of the latter,' all of the casings are apertured above the platform and toward the platform in the manner described; 'a drum journaled in said casing with its axis transverse the beam and the latter centrally located with reference to said axis,' all of the drums examined are mounted with reference to the scale beam in the manner described; 'said drum bearing weight and price inscriptions to show through said apertures of the casing,' all of the drums examined bear the weight and price inscriptions showing through the apertures in the casing; 'a gear-wheel secured to the drum,' all of the exhibits examined have the gear-wheel secured to the drum; 'a rack-bar meshing with said gear-wheel and pivotally connected with the scale-beam where the latter extends below the drum,' all of the exhibits examined have the rack-bar meshing with the gear-wheel and pivotally connected with the scale-beam as described; 'and load-counter-balancing means connected with the scale-beam in rear of the pivotal support thereon for the platform,'' all of the exhibits examined have load-balancing means connected with the scale beam in the manner described herein.

1087 "Do you want this detail all the way that way? I could cut it short or not. Well, I will put it this way. I also find a claim 8 in which the various elements mentioned are found in all of the exhibits I have examined, without going into detail there.

"The Master: Do you include in that the physical exhibits?

"A. Yes, every one here that I have examined. (Indicating the two machines and photographs.)

"Mr. Hibben:

"Q. What ones do you mean you have examined? State them by number.

"A. That's what I did in the answer before.

"The Master I didn't know whether you referred to the two machines.

"A. Yes, those two and the ones described by Mr. Reeves here and shown in these cuts.

"Mr. Hibben:

"Q. What claim 8 do you refer to?

"A. Claim 8 of 839,736.

"Q. Will you please make the same comparison of that claim with the cylinder scales as disclosed by those exhibits which you have examined?

"A. Claim 8 reads: 'In a scale'—in making this comparison Claim 8 has the following elements: 'In a scale, the combination with indicating mechanism of a rotary character mounted on an axis,' all of the exhibits which I have examined have indicating mechanism of this character and so mounted; 'a gear thereon,' all of the exhibits examined have a gear mounted on the rotaray indicating mechanism; 'the weighing mechanism including a main beam diverted from the line of its straight body,' all of the exhibits examined have a main beam which I have hereinabove referred to as the scale beam mounted in this manner; 'a pivot standing within the divergent portion of the beam,' all of the exhibits examined have a pivot of this kind.

"Q Just what pivot is that?

"A. That is the one on which the pendulum is mounted. 'A pendulum hanging therefrom,' all of the exhibits examined have a pendulum hanging from this point; 'and connections at one side of said pivot between the pendulum and the beam'; all of the exhibits examined have this connection; 'of a rack-bar pivoted to the beam at the other side of said pivot with its teeth engaging the gear of the indicating mechanism, and means for counterbalancing all movable parts which are not supported on their own pivots,'

1088 all of the exhibits examined have a means for counterbalancing all movable parts not supported on their own pivot.

"Q. What are those means according to this patent, No. 37; what are the physical features? Please point them out by reference letter or otherwise.

"A. In the patent herein the means described for counterbalancing the commodity is a weight, 18, extending from the disk, 6.

"Q. I notice that the last element of Claim 1 reads, 'Load-counterbalancing means connected with the scale-beam in rear of the pivotal support thereon for the platform,' please point out in this patent, Exhibit No. 37, such load-counterbalancing means.

"A. In the patent this is the entire pendulum structure consisting of a weight, 9, on the end of a stem, 8, extending from a disk, 6, which is pivoted, and this pendulum mechanism is connected with the scale beam through an arm, 10, and link, 11.

"Q. I now call your attention to Defendant's Exhibits 38 and 39, being patents No. 667,652 and 830,976, and will ask you to compare the structure set forth in these patents with the structure of cylinder scale shown by said exhibits, being 51, 52, 53, 54, 55, 56, 57 and 58, and state whether you find embodied in the scales disclosed in said exhibit the same or substantially the same structure.

"Mr Zane: Of course, subject to our objection.

"A. These two patents relate to constructions whereby the load-counterbalancing mechanism and other moving parts of the scale are aided in coming to a quick stop and also to means for offsetting the tare when it is desired upon the scales. I find the means for damping or controlling the vibration of the scales is found in all of the exhibits examined, while the means for offsetting the tare is so described that it could be used in conjunction with all of the exhibits examined. The damping means referred to in my answer comprises a cylinder containing oil or other liquid which is movably mounted on a piston and stem, the piston adapted to be always in the oil and the stem being pivotally connected with a moving part of the scale, as for example, the scale-beam. I find in all of the exhibits a cylinder with liquid and with the piston in the liquid and the stem of the piston connected with the scale-beam.

"Mr. Zane: Move to strike out his answer for the reason that everything he has stated in regard to the cylinder which he
1089 has been calling a dash-pot is wholly immaterial because the dash-pot is only mentioned in the patents in connection with other mechanism. There is no such thing as a patent for the dash-pot alone as an element and the form of the patent is an admission that that is open to the public and unpatentable.

"The Master: Objection denied.

"Mr. Hibben:

"Q. In all of the scales of said exhibits just where is this cylinder or dash-pot located and to what part of the scale is it operatively connected?

"A. It is located on the base of the scales. Well, I will put it this way: The cylinder is located on the base of the scales and the piston is pivotally connected with the scale beam in all of the exhibits examined.

"Q. In respect to those cylinder scales of defendant's as shown by these exhibits which employ a tare weight where is that tare weight located?

"A. On the main beam or scale beam, the construction being such that the tare beam is carried and moves always with the scale beam.

"Q. What is the purpose of a tare weight?

"A. For example, if the weight of a crock of lard is to be determined the crock or vessel would be first placed upon the scale and the weight of that would of course depress the scale beam and move the indicating mechanism. The poise upon the tare beam is then moved along the tare beam until it offsets the weight of the crock, the indiacting mechanism of the scale being thereby returned to zero. Then when the contents of the vessel are placed into the crock, the weight of the contents alone will be shown in the indicating mechanism of this scale, the weight of the crock, being of course on the tare beam.

"Q. Now, will you please examine the claims of these two patents, Exhibits 38 and 39, and compare the same with the cylinder scales shown by those exhibits which you have examined and state whether you find embodied in any of those scales the structure set forth in any claim or claims of said patents?

"A. Referring first to the dash-pot or damping device, I find that claims 1 and 4 of patent No. 667,652, Exhibit No. 38, and claims No. 5, 6, 7, 8 and 9 in patent No. 830,976, Exhibit No. 36, embody elements which are found in the exhibits to which my attention was called; for example, taking the claims in order, claim 1 of Ex-
1090 hibit No. 38 includes, 'In a weighing-scale, the combination of the supporting frame,' that supporting frame is of course included in all the exhibits; 'a dash-pot secured thereto and adapted to contain a liquid,' the dash-pot is included in the exhibits mentioned and I have called it in my previous answer a cylinder to distinguish it from the piston part of the dash-pot, the part containing the liquid is the cylinder in my manner of expressing it; 'of a piston rod and piston carried by a moving part of the weighing mechanism,' the various exhibits have the piston and piston rod carried by, that is, pivotally connected with the scale beam which is a moving part of the weighing mechanism; 'and arranged to move in the dash-pot,' they are arranged so that they move in the liquid in the cylinder; 'the dash-pot having above the parts thereof in which the piston moves a chamber of greater diameter provided with an internal depending lip surrounding the opening for the piston rod,' this particular construction of the dash-pot is well shown in Exhibit 55, the top of which is of greater diameter than the lower part in exactly the manner described in said claim.

"Claim 4 recites 'In a weighing scale, the combination with the supporting frame,' this is the base in all of the scales; 'The weighing mechanism,' that's the load-balancing mechanism or counter means in all of them; 'a piston, and a rod connecting it with the said mechanism,' all the devices have the piston rod and the piston and the rod is connected with this weighing mechanism through the scale beam; 'of a cylinder mounted on the frame and having at its lower

portion a dash-pot in which the piston moves and at its upper portion a chamber of greater diameter than the dash-pot,' this is as I described before. The cylinder is sometimes called the dash-pot and sometimes the cylinder. The construction of that is that the lower portion of it is of lesser diameter than the upper portion and the oil is ordinarily contained in the lower portion in which also moves a piston exactly as recited herein. 'And a lip depending from the upper end of the cylinder and surrounding the piston rod, part of said cylinder being removable so as to provide access to its interior,' the lip is joined—it is a kind of a cube or depending portion loosely surrounding the piston rod adapted to extend down or up so as to prevent the out-flowing of oil when the scale is worked hard. It is contained in the various exhibits. It says 'part of said cylin-
1091 der being removable so as to provide access to its interior.' The top of all these dash-pots is removable.

"Now, take Claim 5 of Exhibit 39 which recites 'In a scale, the combination with the main beam having fulerums mounted on a support rising from the base,' all the exhibits have this main beam supported on fulcrums upon the base; 'a pan or platform carried by said beam,' all of them have the pan or platform; 'means for offsetting the weight of the load,' all the exhibits have the means for offsetting the weight of the load; 'an upright cylinder containing a dash-pot,' that's, as I explained before, it is sometimes called a cylinder and sometimes a dash-pot, but it is the cylinder mounted in the base in which the oil is contained; 'and a nipple extending downward from the upper end thereof,' this nipple extending downward is, as I explained, the tube that loosely surrounds the piston rod and prevents the outcropping of oil; 'of a rod connected with a moving part of the scale mechanism and passing loosely through the nipple,' this is the piston rod which is connected with the main beam or scale beam and passes loosely through this nipple; 'and a piston on the rod moving within the dash-pot, as and for the purpose set forth,' the piston in all of them is connected at the lower end of the rod and is immersed in the liquid within the cylinder. All of the Exhibits have this piston rod and piston rod connection as recited.

"Taking Claim 6 of this same Exhibit, it reads, 'In a scale, the combination with the main beam having fulerums mounted on a support rising from the base,' that is the scale beam which is fulcrumed upon the standards upon the base in all the exhibits; 'a pan or platform carried by said beam,' all the exhibits having that pan or platform; 'means for offsetting the weight of the load,' all of the exhibits have the means for offsetting the weight of the load; 'an upright cylinder containing a dash-pot,' this is the cylinder containing the oil which is supported in an upright position upon the base in all of the exhibits; 'and a removable cover therefor having a nipple extending downward,' the cover or cap which is screw threaded so as to be removable secured to the cylinder carries the nipple or tube which loosely surrounds the piston rod and extends downwardly inside the cylinder; that's in all of the exhibits; 'of a rod connected with the scale beam and passing loosely through the cover and nipple,' that is the piston rod which is pivotally secured to the scale beam

and extends loosely through the nipple; 'and a piston on the
1092 rod moving within the dash-pot, as and for the purpose set forth,' all the exhibits have the piston immersed in the cylinder or dash-pot and connected with the piston rod.

"Now, considering Claim 7 of this same exhibit, it includes: "In a scale the combination with an upright cylinder containing at its lower end a dash-pot and at its upper end a chamber,' the upright cylinder mounted upon the base, for example, in Exhibit No. 55 contains the lower portion in which the oil is, and at the upper portion a chamber of greater diameter as recited therein; 'and a recovable cover therefor having a nipple extending downward into said chamber,' all the exhibits have this removable cover on which is the nipple extending downwardly and loosely surrounding the piston rod; 'which latter around said nipple is of no less capacity than said dash-pot,' that phrase means that the chamber at the upper extremity—well, put it this way. The chamber at the upper end of the cylinder as expressed above in this claim is of larger diameter than the part carrying the oil in all of the exhibits. 'Of a rod connected with a moving part of the scale mechanism and passing loosely through the nipple and cover,' this is the piston rod which is pivotally connected at its upper extremity with the scale beam and passing loosely through the nipple and cover in all of the exhibits; 'and a piston on the rod moving within the dash-pot,' that is the piston at the lower end of the piston rod which is normally immersed in the liquid of the dash-pot. This is true of all the exhibits.

"Considering Claim 8, which includes 'In a scale, the combination with an upright cylinder having at its upper end a chamber and at its lower end a dash-pot filled with liquid. Now, this is the cylinder which at its lower extremity has a chamber of lesser diameter in which the liquid normally is held and at its upper end a chamber of greater diameter. 'And a cover for the cylinder having a nipple extending into the chamber,' that is, as explained above, the cover which is removably secured and carries this nipple or tube loosely surrounding the piston rod, and extending in the chamber; 'The capacity of the latter around said nipple being greater than that of the dash-pot,' that, as I explained before in this claim, is the chamber at the top of the cylinder of greater diameter than that at the bottom, that's in the exhibits; 'of a rod connected with the moving part of the scale mechanism and extending downward through said nipple,' that is the piston rod connected at its upper ex-
1093 tremity with the scale beam and extending down with the nipple and cover; 'and a perforated piston adjustably mounted on the rod and standing within the dash-pot,' this is the piston at the lower extremity of the piston rod and it is perforated and is immersed in the oil, the construction being such that you can move the piston so as to adjust it, that is, it is adjustably mounted on the rod in all the exhibits.

"Considering Claim 9, 'In a scale, the combination with an upright cylinder having at its upper end a chamber and at its lower end a dash-pot filled with liquid'—this is the cylinder or dash-pot which has the lower portion containing oil and of lesser diameter

than the upper portion or chamber—'and a cover for the cylinder having a nipple extending into the chamber,'—that is the cover which is removably secured to the cylinder and carries the nipple loosely surrounding the piston rod and extending into the chamber,—'the capacity of the latter around said nipple being greater than that of the dash-pot,'—that is the chamber at the upper extremity of greater diameter—'of a rod connected with a moving part of the scale mechanism and extending downward through said nipple,'—that is the piston rod which is connected at its upper end to the scale beam and extends through the nipple into the chamber—'a piston mounted on the rod and standing within the dash-pot,—that is the piston secured to the piston rod at its lower extremity and normally immersed in the liquid in the dash-pot—'and nuts on said rod above and below the piston for adjusting the latter, substantially as described,—that is the moving of the piston so that it can be adjustably secured to the piston rod.

"Q. I notice that Claims 5 and 6 of this patent 830,976 include as an element 'means for offsetting the weight of the load.' Will you please point out in the patent the parts or devices constituting such means, and also point out in Defendant's cylinder scales the corresponding parts?

"A. The means for offsetting the load is another way of expressing the weighing mechanism or load-counterbalancing mechanism. It comprises in the patent the pendulum which is connected with the scale beam so as to be elevated when a commodity is placed upon the scale platform, and in the various exhibits it also comprises the pendulums which are so connected with the scale beam which supports the platform that when a commodity is placed on the platform the pendulum is elevated to offset the weight of the load.

1094 "There is one thing I just happened to think of in that question preceding this. I said referring to the dash-pot mechanism first, and I never got back to the rest of it. If I can complete that answer I will proceed as follows.

"Q. Go ahead.

"A. Following the tare beam arrangement to which reference has been made, I will compare Claims 1 and 2 of the Exhibit No. 39, Claim 1 of which includes 'In a scale, the combination with the main beam having fulcrums mounted on a support'—that is the scale beam which is mounted upon the fulcrums upon the upper base,—the pan or platform pivotally supported upon and carried by the main beam"—this is the pan or platform in all the exhibits which is pivotally supported up on the scale beam,—'and means for reducing vibration of said beam'—that is the means for damping the movement of the various parts which I have heretofore described, the dash-pot means—'of an auxiliary or tare beam connected and moving with the main beam and located beneath the pan or platform'—this is the auxiliary or tare beam which is secured to the main beam and upon the main beam so that it naturally passes under the platform or pan, which is, as shown in all the exhibits, resting upon or is normally above the main beam,—'a tare weight thereon'—that is the poise that slides along the tare beam,—'and

means connected with the main beam for automatically offsetting the weight of the load'—that is the weighing means or load-counterbalancing means or load offsetting means, variously described, and consists of the pendulum mechanism connected with the scale beam so as to automatically assume a position offsetting the weight of the load when a commodity is placed upon the platform. This is in all of the exhibits.

Considering Claim 2, it includes: 'In a scale, the combination with the main beam having fulcrums mounted on a support'—that is the scale beam which is fulcrumed upon supports upon the scale base; 'the pan or platform pivotally supported upon and carried by the main beam'—that is the pan or platform which rests upon the scale beam in all of the exhibits; 'and means for reducing vibration of said beam'—that is the means for damping or controlling the movements of the various parts, and, as I have heretofore explained in answer to this question, is the dash-pot mechanism; 'of an auxiliary or tare beam connected and moving with the main beam and
located beneath the pan or platform and extending past the
1095 main fulcrum'—that is the auxiliary or tare beam which is
mounted upon the scale beam and is secured thereon adjacent to the extremities of the beam, thereby passing the main fulcrum pivot and mounted of course under the platform which rests upon and is normally above the scale beam; 'a tare weight thereon'—this is the poise that slides upon the tare beam; 'and means connected with the main beam for automatically offsetting the weight of the load'—that is the weighing mechanism, the load offsetting mechanism and in the various exhibits is the pendulum mechanism which is connected with the main beam so as to assume a position automatically offsetting the weight of the load placed upon the scale platform.

"Q. I now show you Exhibit 59, being patent 1,166,128, directing your special attention to a structure illustrated in Figure 12 and also to the structure relating to means for adjusting the pendulum cam and also the means for locating and fixing the knife pivot in the pendulum, and I will ask you to compare the structure set forth in said patent in those particulars, and state whether you find the same or substantially the same structure embodied in any of the scales, cylinder scales of defendant, as shown by the exhibits which you have examined?

"A. Figure 12 of Exhibit 59 to which you have called my attention shows what we call the stirrup mechanism and relates to the means for connecting the rear or inner end of the scale beam or lever with the pendulum mechanism, the construction being such that the scale beam is mounted so that it can be quickly detached or assembled into position, but which will be permanently held in position as long as necessary, that is, it cannot accidently jump out. The construction of this mechanism is that it carries a seat for a cone pivot upon the inner or rear end of the scale beam and has associated with this seat means which will hold the beam in the seat during the weighing operation or until it is desired to detach this, this means being adjustable with the seat. Now, I find that several of the exhibits have this mechanism, others I find have not.

"Q. At this point, point out what particular scale exhibits have such feature, and which have not?

"A. Why, apparently the Exhibit No. 50 showing the scale styles 300 has not, nor has Exhibit No. 51 styles 345, and like or kindred style numbers. It is not apparent that the Exhibit marked 52, showing scales numbered 81 and kindred styles, embodies
1096 this improvement, nor is it apparent in the Exhibit No. 53, showing the styles N numbered 181 and kindred styles. In the remaining exhibits which include Exhibit No. 55, the machine which is here at the present time, do include this feature.

"Q. Give the numbers?

"A. Exhibits No. 54, 55, 56, 57 and 58.

"Q. Now, will you please examine Defendant's Exhibit No. 55, being the gold scale in evidence, and point out the parts embodied therein which you have referred to as the stirrup construction?

"A. In the Exhibit No. 55 to which attention has been called what I have referred to as the stirrup mechanism is contained at the lower left-hand portion looking from the rear of the scale and comprises the mechanism to which the band passing around the cam of the scale is secured and whereby connection from this means, which I have called the stirrup, surrounds the inner end of the scale beam. The seat to which I have referred is the one that is screw-threaded so as to be adjustably mounted in the base of the stirrup, and the upper extremity of that is shaped, or is cup-shaped I would call it, so as to receive the cone pivot which extends downwardly from the inner end of the scale beam resting in this cup? The adjustable feature to which I refer comprises a U-shaped member one arm of which extends below the beam and another arm of which extends above and carries a pin which is held just above the top of the scale beam in such position that you cannot bounce that scale beam so as to release it. Were it not for this mechanism, the scale beam might come out, but with that particular mechanism it is so positioned that no matter how you hammer or jerk, that restraining means holds it in the correct position. That is what I call the stirrup mechanism.

"Q. Now, will you please go ahead with your answer to the preceding question with regard to the other matters to which I directed your attention?

"A. Next considering the means for adjusting the pendulum cam, this comprises the mechanism whereby the cam or eccentric segment which is carried by the pendulum may be rotated relatively to the pendulum pivot so as to make adjustments in setting or correcting the position of the weighing mechanism, and it comprises means whereby the cam can be forced in either direction about the pendulum pivot and means for securing the cam in any of its
1097 adjusted positions. For example, in the patent and in several of the exhibits which I have examined, the pendulum cam adjusting means comprises an arbor around which this segment or cam is mounted and screws extending through the pendulum on opposite sides of the arbor and pivot and projecting against this segment, one or the other of the screws being rotated to force the

segment in either direction, one being utilized to force it in one direction and the other being utilized to force it in the opposite direction, and the check pieces which are the sides of the cam and pendulum mechanism and which may be adjusted so as to plant the pendulum rod and cam so as to secure it in any of its adjusted positions. Of course, the two screws will also secure positions in one sense, but the check pieces are also utilized to clamp it, to maintain the adjusting positions. I might explain here that when it is desired to adjust this cam mechanism you first loosen the check pieces, then loosen the screw in the direction in which it is to be turned, then rotate the other screw so as to force it in the direction of the loosened screw, then return the various parts to their normal position, clamping it in the adjusted position.

"Q. At this point will you examine the scales of the exhibits examined by you and state which exhibit or exhibits embody the structure to which you have just referred in your last answer?

"A. I would say here that all of the exhibits which were referred to as containing the stirrup mechanism also contain the pendulum cam adjustments, and those which were described as not containing them do not apparently contain this pendulum cam adjusting means.

"Q. Now, go ahead with your consideration of the third feature of this patent?

"A. The third feature is the means of moving the pendulum pivot. This consists of means for securing the knife edged pivot which supports the pendulum and which extends transversely of the pendulum and on opposite sides thereof, it being secured at its central portion to the pendulum itself and at the sides resting in bearings carried by the housing of the scale. The means for holding the knife edged pivot in the pendulum comprise an arbor with a bore, central bore, which is of course transverse to the pendulum, and this arbor has a sector or wedge-shaped portion cut out from its periphery to said bore; the knife edged pivot extending within this cut out sec-
1098 tor, so that its edge is at substantially the central portion of the arbor and the outer portion of the knife edged pivots is substantially adjacent the periphery of the arbor. Then means are provided for securing this position to main the knife pivot at all times, these means comprising a screw or similar means for contacting the arbor or knife pivot. Apparently this is contained in all of the exhibits which I have referred to as containing the pendulum, cam adjustment and stirrup features mentioned in connection w-th the same question.

"Q. Now, will you please examine the Defendant's Exhibit No. 55 and state whether you find the last considered feature embodied therein?

"A. Yes, it is contained in Exhibit 55.

"Q. Now, please examine the claims of this patent No. 1,166,128, being Defendant's Exhibit 59, and state whether you find embodied in any of the exhibits which you have examined the structure set forth in any one or more of said claims.

"A. Considering first the stirrup mechanism, I would call attention to Claims 1, 2 and 3 of the patent. Claim 1 includes 'In a

pendulum scale, the combination with the scale beam and pendulum'—all of the exhibits which I have referred to as describing this feature contain the scale beam and pendulum; 'a cone pivot upon the beam'—they all contain the cone pivot at the inner or rear end of the beam; 'of a connection between the two comprising a stirrup'—they all contain the stirrup with the stirrup connection as here expressed; 'an adjustable seat on the stirrup for the cone pivot'—they all contain the adjustable seat for the cone pivot; 'a pin on the stirrup co-acting with the back of the beam to prevent the cone-pivot leaving its socket'—all of them contain this pin adjacent to the back of the beam in position to prevent the cone pivot leaving its socket; 'and means whereby the adjustment of the socket likewise adjusts the position of the pin'—they all contain these means whereby when the seat or the socket is adjusted the pin is likewise moved so as to maintain the original relation with reference to the back of the beam.

"Now, considering claim 2 which include 'In a scale, the combination with a pendulum and a main beam'—all of the exhibits to which I have referred as containing this structure contain the pendulum and main beam; 'of a stirrup forming part of the connection therefor'—they all contain the stirrup; 'a cone on the beam'—
1099 they all contain the cone on the beam; 'and an adjustable socket upon the stirrup co-acting therewith'—they all contain this adjustable socket or seat which co-acts with the cone upon the beam; 'a pin projecting from the stirrup into proximity to the top of the beam'—and they all contain this pin which projects from the stirrup into close relation with the top of the beam; 'and a yoke connected to the adjustable socket and adapted to limit the projection of the pin'—they all contain this yoke or U-shaped member connected to the adjustable socket and moving therewith to limit the projection of the pin.

"Next considering Claim 3 which includes 'In a pendulum scale and in combination with the beam and pendulum'"—all of the exhibits which I have referred to as containing the stirrup mechanism contain the beam and pendulum; a 'stirrup forming a part of the connection between the above-mention parts'—they all contain this stirrup; 'a cone upon the beam and an adjustable socket upon the stirrup adapted to receive the cone'—they all contain this cone upon the beam and the adjustable socket in which the cone rests; 'a spring pressed pin arranged to be projected into proximity to the top of the beam'—they all contain this pin which at its upper extremity is pressed downward by the spring into close relation with the top of the beam; 'and an adjustable yoke connected to the socket at one end and having in its other end a perforation through which the spring pressed pin extends'—they all contain this adjustable yoke or U-shaped member connected at its lower extremity to the socket and having at its other end the perforation through which the pin extends.

"Now, considering the means for adjusting the pendulum cam, I would call attention to Claims 4 and 5. Claim 4 includes 'In a

pendulum scale, a pendulum comprising a weight and a rod'—all of the scales to which I have referred as containing this pendulum adjusting means contain the pendulum with a weight and a rod, that's the usual construction; 'an enlarged hub upon the rod having a transverse bore'—the hub portion of the rod or pendulum stem is enlarged and is bored transversely in all of the exhibits to which I have referred; 'an arbor seated within the bore'—this is an arbor at the center of the hub, that's contained in all of them; 'a casting comprising a segment and pair of cheek pieces'—the segment is the cam or eccentric segment over which passes the band or ribbon through which connection is made with the scale beam, and
1100 the pair of cheek pieces are the side members which I have described as being part of the clamping means. They are contained in all of the exhibits to which I have referred. 'The latter'—that is, the cheek pieces—'embracing the rod head upon its opposite sides and bored to receive the arbor,'—they all contain this construction. The cheek pieces are bored to receive the arbor and extend at the sides. 'Screws extending through the pendulum rod head and bearing upon the castings upon opposite sides of the arbor for adjusting the segment with relation to the pendulum'—these are the two screws arranged at opposite sides of the pendulum upon an arbor and adapted to be threaded through the pendulum and contacting with the opposite sides of the segment. One of these screws is adapted to rotate the cam in one direction and the other to rotate the cam in the opposite direction. All the exhibits contain the two screws mounted as herein described.

"Q. By 'all the exhibits' you mean?

"A. All the exhibits to which I have referred as containing this mechanism.

" 'and means for drawing the cheek pieces together to clamp the pendulum rod head in adjusted position'—all of the exhibits to which I have referred contain means, as, for example, a screw for drawing the cheek pieces into clamping position and holding them to maintain the adjusted position.

"Next considering Claim 5 which includes "In a pendulum scale, a pendulum comprising a weight and a rod'—in all of the exhibits to which I have referred this pendulum comprises the weight and the rod; 'an enlarged hub upon the rod having a transverse bore'—they all have this enlarged hub which is bored transversely; 'an arbor seated within the bore'—they all have this arbor within the bore, "a casting comprising a segment and a pair of cheek pieces'—they all have, that is, all to which I have referred have this segment and the cheek pieces; 'the latter'—that is, the cheek pieces—'embracing the rod head upon its opposite sides and bored to receive the arbor'—all of the exhibits to which I have referred have the cheek pieces embodying the rod head and at the sides being bored to receive the arbor as herein described. 'Screws extending through the pendulum rod head and bearing upon the casting upon opposite sides of the arbor for adjusting the segment with relation to the pendulum'—all of the exhibits to which I have referred contain these screws on opposite

sides of the pendulum hub for adjusting the segment. 'A
1101 screw bolt passing through the cheek pieces and the pendulum rod head for clamping the parts in adjusted position'—all of the exhibits which I have referred contained this screw or bolt passing through the cheek peices and adapted to clamp the parts to the adjusted positions.

"Next referring to the means for moving the pendulum or pivot, I would call attention to Claims 6, 7, and 8.

"Claim 8 includes 'In a pendulum scale, a pendulum and rod'—in all of the exhibits to which I have referred as containing this pivot mounting the pendulum and rod is included; 'the latter,' that is, the rod—'having an enlarged hub'—all of the exhibits to which I have referred have this enlarged hub; 'With a transverse bore'—they are all bored transversely; 'an arbor extending through the bore having a cut-out sector'—all of the exhibits to which I have referred have this arbor cut with a wide shaped piece or sector shaped piece as described herein; 'and a knife extending longitudinally of the arbor within the cut out sector and extending beyond the ends of the arbor'—this is the knife pivot of the pendulum and all of the exhibits to which I have referred have that knife pivot so mounted, that is, longitudinally to the arbor within the cut out sector and with its sides or ends extending beyond the sides of the pendulum.

"Next considering Claim 7, this claim includes exactly the same elements which are mentioned in Claim 6 expressed in exactly the same language, and in addition has 'and means for clamping the knife in the arbor.' All of the exhibits to which I have referred have some means for clamping this knife pivot in the arbor.

"Next considering Claim 8, this claim includes all of elements described in connection with Claim 6 and in exactly the same language and in addition includes 'and a screw bolt for compressing the arbor upon the knife blade.' The various exhibits to which I have referred contain a screw or bolt arranged so as to compress the arbor upon the knife blade to clamp the knife in the arbor.

"Thus all of the claims in this Exhibit 59 are so constructed as to refer to one or the other of the several means to which my attention was called and which are included in these several exhibits to which I have referred.

"Q. I now call your attention to Defendant's Exhibit No. 60, being patent 1,122,222, and will ask you to compare the same with the cylinder scales shown by the exhibits to which I have
1102 been referring, and state whether you find embodied in any of such scales the structure shown in said patent?

"A. In this Exhibit 60 is disclosed means for securing the main lever or scale beam of the patent shown in the various exhibits out of their bearings whenever desired, as, for example, during transportation, and it comprises a pair of lugs or ears carried by the housing of the scales and perforated to receive a pin and the scale beam adjacent these ears or lugs is likewise perforated so that it can be swung in aligning position with the perforations in the ears or lugs and the pin inserted through the aligned perforations in the standards which support the fulcrum pivots, which normally support

the fulcrum pivots of the scale beam or lever, and apertures in the main beam or lever itself which normally are out of position with the apertures in the standards, the arrangement being such that the main beam or lever can be swung so as to bring the various apertures into alignment and a pin then inserted through all of the aligned apertures in the beam and standard which pin will hold the lever in a position wherein its pivot, the fulcrum pivot, will not contact with the bearings upon which it normally rests. Means are provided for locking these pins in position and spacing means may be provided to prevent sidewise or lateral displacement of the beam when it is supported upon these pins. I find that the subject matter of Exhibit 60 is not shown as being contained in Defendant's Exhibits No. 50, 51, 52 or 53, but in all of the remaining exhibits including Exhibits 54, 55, 56, 57 and 58, the subject matter is included.

"Q. Now, will you please examine the claims of this patent 1,122,222, being Exhibit 60, and state whether you find embodied in any of defendant's cylinder scales as shown by Defendant's Exhibits 54 to 58 inclusive the structure set forth in any one or more of said claims.

"A. I find that the subject matter of all of these claims is contained in all of the exhibits to which I have referred as containing or as embodying the disclosure of Exhibit No. 60, for instance, Claim 1 includes 'In a scale, a beam'—all of the exhibits to which I have referred contain the beam, that is, the main beam or scale beam; 'and supports therefor'—they all contain the supports therefor. That is the standards upon which it normally rests. 'Having perforations arranged to be brought into registry'—all of the scales to which I have referred have these perforations in the stand-
1103 ards and beam which are arranged so as to be brought into registry when desired; 'and a locking rod for insertion in the perforations'—all of the scales to which I have referred have this locking rod which may be inserted through the apertures or perforations when they are in registry.

"Claim 2 includes 'In a scale, a beam, and supports therefor,'—now, all of the scales shown in the exhibits to which I have referred contain this beam and the supports therefor, that is, the standards. 'Having perforations arranged to be brought into registry'—I might shorten this slightly by putting it this way. Claim 2 contains all of the elements referred to in Claim 1 in exactly the same language and in addition includes 'the latter being so arranged that they are in alinement when the beam is lifted slightly from its bearings.' 'The latter' here refers to the perforations, and in all the exhibits to which I have referred to perforations are so arranged that when the beam is lifted slightly from its bearings the perforations are in alinement.

"Claim 3 contains all of the elements which I have referred to in connection with Claims 1 and 2 in exactly the same manner and in addition recite 'and means to secure the rod against displacement.' All of the exhibits to which I have referred contain means, that is, a cotter pin adapted to extend through an aperture in the locking

pin and arranged so as to secure this locking rod against displacement.

"Claim 4 recites 'In a scale, a beam having a perforation in the nose thereof'—all of the exhibits to which I have referred as containing the disclosure, Exhibit No. 60, have the beam. That is the main beam or lever which is perforated in the nose that is adjacent the inner or rear extremity. 'Lugs on the casing having openings arranged to register with the perforation in the scale beam'—all of the exhibits to which I have referred have these lugs or ears carried by the housing and perforated, their openings being arranged so that they may register with the perforation in the scale beam when the scale beam is swung into position. 'A rod for preventing movement of the scale beam'—that is the rod arranged to extend through the alined apertures in the beam and lugs, and all of the exhibits to which I have referred contain this locking rod. 'And means for securing the rod against dislodgment'—the means for securing the rod against dislodgment is contained in all of the exhibits to which I have referred and comprises a cotter pin adoapted to extend through an aperture in one extremity of the locking rod.

1104 "Claim 5 recites 'In a scale, a beam and beam supports'—in all of the exhibits to which I have referred there is contained the beam and the beam supports. 'Each provided with perforations'—all of the exhibits to which I have referred have these perforations provided. 'A locking rod for insertion therein'—in all of the exhibits to which I have referred have this locking rod for insertion in these perforations. 'The perforations being so arranged that they are in alinement when the beam is lifted slightly from its bearing'—all of the exhibits to which I have referred the perforations are so arranged that the beam must be lifted slightly from its bearing to bring the various perforations into alinement. 'And spacers arranged on the rod between the beam and the bearing'—this comprises little members adapted to prevent sidewise or lateral displacement of the beam and are arranged on the locking rod between the beam and the standards so as to fill up all space, thereby getting their name 'spacers.' They are shown, for example, in 'Figure 1 of the Exhibit 60, and are contained in all of the exhibits to which I have referred.

"Claim 6 includes 'In a scale, a scale beam'—all of the exhibits to which I have referred contain this scale beam. 'A frame through which the nose of the beam extends'—that is the construction at the inner end of the housing through which the nose of the beam extends. 'The beam and frame on each side thereof being perforated'—in all of the exhibits to which I have referred this beam is perforated adjacent to the nose thereof and the frame, that is, these ears or lugs on the housing are also perforated. 'The perforations being so placed that they may be brought into alinement'—the arrangement in all of the exhibits to which I have referred is such that the perforations adjacent to the nose of the beam and in these lugs may be brought into alinement when the beam is swung into this position. 'And a rod adapted to extend transversely through

the perforations in the beam and frame to lock the former against accidental movement during shipment'—all of the exhibits to which I have referred contain this rod adapted to extend transversely through the perforations in the beam and frame when these perforations are in alined position and will hold the scale beam against movement as described.

"Thus all of the claims of this patent recite constructions which are found in the several exhibits to which I have referred as containing the subject matter of Exhibit No. 60.

1105 "Q. Please examine patent 1,068,616, being Defendant's Exhibit 47, and compare the same with the Toledo cylinder scales shown in the exhibits which you have been considering and point out the parts or features shown in such patent which you find embodied in those scales or any of them?

"A. I find that this patent, Exhibit 47, contains disclosures of several elements that are contained in several of the exhibits which I have examined. Among the elements disclosed in the patent are: The means for automatically illuminating the electric lights arranged adjacent to the top of the cylinder scales in the exhibit when a commodity is placed upon the platform; also the means whereby the illumination is made to show through transparencies or other signs arranged in superstructures about the cylinder in the various exhibits; also the means for securing the indicating cylinder so that it is firmly held out of its bearing whenever desired, as, for example, during shipment.

"Now, in examining the various exhibits I find that Exhibit No. 55, the machine here in exhibit, embodies all of the features which I have enumerated as do the scales shown in exhibits No. 56, 58 and certain of the illustrations in connection with the Exhibits 52 and 53, that is, the electric types of these series. The means for securing the cylinder itself out of its bearings is shown in Defendant's Exhibits No. 52, 53, 54, 55, 56, 57 and 58.

"Q. Please examine the claims of this patent, Defendant's Exhibit 47, and compare the same with the cylinder scales of the exhibits which you have just considered, pointing out the features or elements of such scales corresponding to the features or elements which you find expressed in said claims?

"A. I would fir-t call attention to Claims 5 and 6 of the patent which relate to the superstructures for the signs or transparencies arranged adjacent the cylinder and adapted to be illuminated when a commodity is placed on the platform.

"Claim 5 includes 'In a weighing scale, the combination of a suitable base'—in all of the exhibits to which I have referred as containing the electric mechanism they employ the suitable base. 'A scale beam mounted thereon and supporting a goods-receiver'—all of them contain the scale beam supporting the goods receiver. 'A housing erected on the base'—they all have the housing erected on the base. 'Load counterbalancing and indicating means arranged in said housing and connected to the beam'—they all have load

1106 counterbalancing,—that is the pendulum mechanism,—and indicating means,—that is the rotating scale,—arranged in

the housing and they are connected with the beam. 'A box-like superstructure on the housing and having transparencies in its sides,'—they all have the box-like superstructure arranged on the housing and having the transparencies on its sides. That is well exhibited in the exhibit No. 55, the machine here, and comprises the superstructures. That is, the parts, in addition to the ordinary housing which can be easily shown by a comparison of Exhibit 55 with the Complainant's Exhibit Defendant's Scale, one has not the superstructure, the Defendant's Exhibit, the other has the superstructure, and I think it is apparent from an inspection as to just what they are at the extreme top of the scale itself.

"Q. You said defendants', didn't you mean complainant's?

"A. Complainant's Exhibit Defendant's Scale, that's the one over here (indicating).

"One or more electric lamps in said superstructure'—all of them have the lamps, always more than one, but the claim reads 'one or more', so as to be broad enough to cover every construction made that I have been able to examine and they are all arranged in this superstructure. 'And a lamp circuit controlled by the scale beam'—they all contain this controlling means whereby the lamp circuit is controlled by the scale beam.

"Now, considering Claim 6 which includes 'In a weighing scale, the combination of a suitable base'—all of the exhibits to which I have referred have this base. 'A scale beam mounted thereon and supporting a goods-receiver'—they will have both the scale beam and the goods-receiver supported thereon. 'A housing erected on the base'—they all have the housing. 'Load counterbalancing and indicating means arranged in said housing and connected to the beam'—they all have the load counterbalancing means and also the indicating means arranged in the housing and both connected with the beam. 'A box-like superstructure on the housing and having transparencies in its sides'—that is the same box-like superstructure to which I referred in connection with Claim 5, and all of the exhibits to which I have referred contain this superstructure. 'One or more electric lamps in the housing adjacent the indicating means'—in all of the exhibits the electric lamps are arranged adjacent the indicating means. By doing this of course the purpose is to
1107 illuminate both the indicating means and the transparencies and in all the exhibits they have this arrangement whereby one or more electric lights are adjacent to the indicating means as specified in this claim. 'And a lamp circuit controlled by the scale beam'—they all have the lamp circuit controlled from the scale beam.

"Now, I will call attention to Claim 9 of this patent which relates to the means for controlling the circuit to automatically illuminate the lighting mechanism when a commodity is placed on the scale. Claim 9 includes 'In a weighing scale, a beam having a scale pan at one end and weight at the other.' In all of the exhibits to which I have called attention the scale pan and weight are arranged. 'Indicating means'—they all have indicating means. The drum chart. 'A lamp arranged to illuminate the indicating means'—they all

have the lamp arranged in position to illuminate the indicating means. 'A circuit for the lamp including a delicately balanced, normally closed switch lever mounted in juxtaposition to the weighted end of the beam.' Now, they all have a circuit with a lamp, and they all have a normal—well, a switch lever arranged so as to operate from the beam. 'And means on the beam for swinging the lever to open the switch as said beam returns to normal position.' Now, that is the means whereby the switch is returned to its normal position after the commodity is released, that is, as it returns to normal position.

"I would next call attention to Claim 10 which refers to the means for holding the indicating cylinder away from its bearings whenever desired and fixing it in this position. Claim 10 reads: 'In a scale, and in combination with the beam thereof'—all of the exhibits to which I have referred as containing this cylinder holding means contain a beam. 'A rotary indicating cylinder'—they all contain a rotary cylinder. 'Connections for rotating the latter from the beam'—they are all connected so that the cylinder is rotated from the beam. 'A casing including the indicating cylinder,'—that is the casing in which is the indicating cylinder. 'Stationary bearings in the casing in which the shaft of the indicating cylinder rests'—they all contain these bearings which are stationary, and which normally support the shaft of the indicating cylinder. They are apparent through the plate glass ends of Exhibit No. 55, and in said exhibit and in practically all the exhibits they comprise two desks arranged so that the cylinder rests in the crotch between the
1108 two, making what we call a disk bearing. 'And means for raising the shaft away from its bearings for shipment.' Now, that means for raising it away from its bearings during shipment is—well, it is hard to see, but it comprises means whereby the cylinder is raised and then a member interposed to maintain it out of its bearings and lock it in the position out of the bearings so that it can be shipped easily without danger of breaking or crushing the chart. I find that all of the elements, including the means for lifting and holding the cylinder away from the bearings, are included in the several exhibits to which I have referred.

"Q. By reference to exhibit No. 55, will you please state what the means are for holding the cylinder out of its bearings for shipment?

"A. If the Master will come to this side here, he can probably see it a little clearer. The means comprises a bell-shaped lever arranged so that it is pivoted at its intermediate points on the frame and the one arm extends under the shaft but out of contact therewith when the scale is in the position for weighing, when it is desired to raise the shaft out of the bearings the other arm of the lever is grasped and swung so as to bring the first mentioned arm into contact with the cylinder shaft and raise the shaft from its position where it normally rests, that is, against the two disk bearings. The lever is then held or then fixed by means of a screw or bolt so as to maintain the cylinder away from the bearings. There is another member which is used on this side to secure the position and aids to fix the position. The bell crank lever is shown on both ends of this scale. Both ends of the shaft are of course lifted and the means for fix-

ing so as to maintain it in a solid, rigid position during shipment is shown on the other side of the scale, it is merely a holding means to fix it.

"I have called attention here to the fact that the claim to which I was last referring, claim 10, is so worded as to include practically any means for raising the shaft away from its bearings for shipment. The means which we have shown in connection with Exhibit 55 is one commonly used, but the claim is worded so as to cover all means therefor and in one or two of the exhibits examined these means have been slightly changed.

"Mr. Zane: Move to strike out his statement as to the wording of the claim and what it means and what it covers.

"The Master: Objection sustained.

1109 "Mr. Hibben:

"Q. Referring to the operating means which you have just described in connection with Exhibit 55, how do those operating means compare with the corresponding operating means of this patent, exhibit 47, as to general construction, mode of operation and result?

"A. They are precisely the same.

"Q. I call your attention to a printed Patent Office copy of United States Patent No. 1,142,165, issued to The Toledo Scale Company, and I will ask you to make the same comparison of the parts and elements shown in this patent with the Toledo Cylinder scales as disclosed by the exhibits which you have been considering.

"Mr. Zane: What's the exhibit number?

"Mr. Hibben: It has no exhibit number.

"Mr. Zane: Has not been offered in evidence?

"Mr. Hibben: No, sir.

"Mr. Zane: We object to it as incompetent, irrelevant and immaterialq, his statement in regard to it.

"The Master: Let's see what it is.

"Mr. Hibben: It is a patent, your Honor please, issued to the Defendant.

"Mr. Zane: If it is material, they have to offer it in evidence.

"Mr. Meads: It is going to be offered in evidence.

"The Master: Well, if you expect to offer it, you had better offer it now.

"Mr. Hibben: All right.

"Mr. Zane: We take an exception to this proceeding because it is contrary to the rules of law.

"Mr. Hibben: I offer that patent in evidence and ask that it be marked Defendant's Exhibit 62.

"Mr. Zane: We object to it as irrelevant and immaterial and incompetent and having no bearing upon the issues here.

"The Master: Well, it is the same character of evidence that's been introduced, is it not, by these other patents, there is nothing to distinguish this from the others.

(Discussion.)

"The Master: I will receive it subject to the objection the same as I have admitted these other patents.

(Said copy of patent 1,142,165, so offered, received in evidence and marked Defendant's Exhibit 62.)

"The Master: The witness now may answer the question first put to him.

1110 "A. I find that the patent 1,142,165, Exhibit No. 62, discloses a means for preventing the communication of shocks such as may be imparted to the platform or lever of the scales to the indicating mechanism and comprises a shock absorbing means arranged to connect the rack rod which operates through a pinion, the rotary cylinder with the scale beam itself. I find that in the exhibits 52, 53, 54, 55, 56, 57 and 58, the shock absorbing means disclosed in this patent are contained. The particular shock absorbing mechanism to which I refer is well shown at Fig. 4 of the patent in question and can be clearly seen through the plate glass in the rear of the Exhibit No. 55.

"Q. Refer to the drawing of this patent and point out by reference numerals the parts constituting the shock absorbing means, as you call it?

"A. In Figs. 3 and 4 are shown what I have referred to as the absorbing means which comprises a weighted casting marked 14, that weighted casting is pivoted to the scale beam through the ears, 14 *a*, and carries a triangular resilient piece of metal marked 15 which has one end secured by means of a clip, 16, and rivets or screws, 17, to the casting, and its other end to the rack bar, 19. The connection whereby the rack bar and resilient plate are joined being through a clamping member, 20, the clamping member being provded with a screw, 21, to draw the edges together and clamp the lower extremity of the rack bar. This connects the rack bar with the scale beam through an intermediate resilient member, and when, for example, a heavy package is dropped upon the scale platform the scale beam will move suddenly, but the resilient connection will absorb the shock and will not impart it to the rack rod and through the rack rod to the cylinder and indicating mechanism. In the same manner when a package that is comparatively heavy is removed from the platform the pendulum would fall from its elevated position to its normal position and would swing the rack rod in the reverse direction but with a substantial shock, and the mounting of this plate intermediate to the rack rod and beam is such that it will absorb shocks in either direction, that is, the flexure of that plate is such that it can be bent in either direction and absorb shocks either due to packages on the platform or due to the pendulum falling from the other direction.

"Q. Please now examine Defendant's Exhibit 55, and state how the shock absorbing means therein compares with the shock
1111 absorbing means of the patent in structure, function and result?

"A. I find that the shock absorbing means shown in exhibit No. 55, is substantially identical with that shown in exhibit No. 62, the patent in question, and comprises the weighted casting which is pivotally connected by ears to the scale beam and carries the resilient plate to which is connected the rack rod, this resilient plate being mounted so that it can flex in either direction substantially as shown and described in the Exhibit 62.

"The function of this shock-absorbing means in Exhibit No. 55, and the result accomplished thereby are precisely the same as the function and result of the mechanism disclosed in the Exhibit No. 62.

"Q. Compare the claims of this patent, No. 1,142,165, being Defendant's Exhibit No. 62, and state whether you find embodied in Defendant's cylinder scales as shown by the exhibits which you have been considering the parts or elements set forth in said claims or any one or more of them?

"A. I find that all of the claims of this patent present structures which are found in all of the exhibits to which I have referred.

"Mr. Zane: Move to strike out his answer.

"The Master: Motion denied. Go ahead.

"A. (continued). The claims when considered in order are: Claim 1, 'In a scale, a beam'—all of the exhibits to which I have referred contain the beam. 'A rocking member pivoted thereon and carrying a leaf spring'—all of the exhibits to which I referred contain this rocking member, the casting to which I have called attention in Exhibit 55, and the leaf spring which I have heretofore called a spring or resilient plate, the member in Exhibit 55 which connects the casting or rocking member with the rack bar. 'And connections for moving the indicating mechanism connected to the leaf spring'—all of the exhibits contain such connections. That is, the rack rod and the pinion and the intermediate mechanism for moving the indicating part of the scale, all of which is connected so as to operate from this leaf spring.

"Claim 2 reads: 'In a scale, the combination with the beam and indicating mechanism.' All of the exhibits to which I have referred contain the beam and indicating mechanism, the chart. 'A
1112 rack and pinion for operating the indicating mechanism'—all of the exhibits to which I have referred contain a rack and pinion for operating this indicating mechanism. 'And connections between the rack and the beam including a rocking member pivoted to the beam and carrying a leaf spring to which the rack is connected'—all of the exhibits to which I have referred contain these connections which include the rocking member which is pivotally connected to the scale beam and carries the leaf spring to which the rack is connected.

"In Claim 3 we have certain reference numerals which refer to the references used in the drawings of this patent: Claim 3 reads: 'In a weiging scale having a rotary cylinder indicator'—that is shown in Figs. 1 and 3 of the patent, and I have found it in all of

the exhibits to which I have referred. 'A beam 3 having an offset member 12.' Now, that is shown in Figs. 1, 2 and 3 of the drawings of the patent, and I have found it in all of the exhibits to which I have referred. 'Lugs 13, upon the member 12'—the lugs 13 are shown in Figs. 1, 2 and 3 of the drawings and I have found them in all of the exhibits to which I have referred. 'A rocking member 14 pivoted between the lugs'—this rocking member 14 is shown in Figs. 1, 3 and 4 of the patent and I have found the same in all of the exhibits to which I have referred, this rocking member being pivoted between lugs on the scale beam substantially as described herein. 'A spring 15 secured along one edge to the rocking member and provided at its outer end with a collar 18'—the spring 15 and collar 18 are shown in Figs. 1, 2, 3 and 4 of the patent, and I have found them in all of the exhibits to which I have referred, the spring being always secured at one edge to the rocking member as herein described. 'A rack bar 19 secured at one end with the collar'—the rack bar 19 is shown in Figs. 1, 3 and a portion thereof is shown in Fig. 4 of the drawings of the patent, and I have found the rack bar in all of the exhibits to which I have referred, it being aways secured at one end, that is, the lower end, within the collar carried by the spring member. 'And a pinion upon the rotary cylinder with which the rack bar co-operates'—this pinion is shown in dotted lines in Fig. 1 of the drawing, and I have found the same in all of the exhibits to which I have referred, this pinion being upon the rotary cylinder and meshing with the rack rod.

1113 "Claim 4 reads 'In a weighing scale having a beam and a computing drum.' All of the exhibits to which I have referred have the beam and the computing drum. 'A connecting rod for rotating the latter'—all of the exhibits have this connecting rod, that is the rack rod. 'A casting pivoted to the scale beam'—all of the exhibits have this casting which I have pointed out in connection with Exhibit 55, and which is substantially the same as that marked 14 in the drawings of the patent. 'And a spring connecting the casting and connecting rod'—all of the exhibits to which I have referred have this spring which connects the casting and the rack rod as herein stated.

"Claim 5 includes 'In a weighing scale having a beam and a rotary indicator'—all of the exhibits to which I have referred have both the beam and the rotary indicator. 'A pinion on the shaft of the latter'—all the exhibits to which I have referred have this pinion on the shaft of the rotary cylinder. 'A rack rod, the rack of which meshes with said pinion'—all the exhibits to which I have referred have the rack rod with the rack thereof meshing with the pinion on the rotary cylinder. 'A casting pivoted to the beam'—all of the exhibits to which I have referred have this casting and it is substantially the same as that illustrated and designated by the numeral 14 in the patent. 'A spring connecting the casting and rack rod'—all of the exhibits to which I have referred have this spring and it connects the casting and rack rod. 'Said casting being over-weighted on that side of its pivotal axis on which the pinion is located'—all the exhibits have the casting arranged as described in said claim.

This possibly requires a little explanation. If Fig. 1 of the drawing is noted, it will be seen that the rack rod has its teeth meshing with the pinion in one direction and in this direction the weighted part of the casting tends so that the weight by gravity tends to hold the teeth of the rack rod in mesh with the pinion. When Fig. 4 is examined, then it shows that the center of gravity of the weighted casting is at one side of the pivotal mounting, so that it is only mounted on one side. I find that this relation whereby the weight of the casting tends to hold the teeth of the rack rod into engagement with the pinion is contained in all of the exhibits referred to.

"Mr. Zane: Do you include in that Complainant's Exhibit of Defendant's scale?

1114 "A. To which I have referred herein. I pointed out first the ones I found in it.

"Claim 6 includes 'In a weighing scale of the class described, having a beam and a rotary indicator'—all of the exhibits to which I have referred have both the beam and rotary indicator. 'A pinion on the shaft of the latter'—all the exhibits referred to have the pinion on the shaft of the rotary indicator. 'A rack rod, the rack of which meshes with the pinion'—all the exhibits referred to have this rack rod with its rack meshing with the pinion. 'A casting pivoted to the beam and over-weighted on that side of the pivotal axis thereof upon which the pinion is located'—all the exhibits referred to have this casting pivoted to the scale beam and overweighted on the side referred to substantially as described herein. 'And a leaf spring rigidly connected to the rack rod at one end and at the other to the casting at a point thereof at one side of the vertical plane of its pivots'—all the exhibits referred to have this leaf spring connected at one end to the rack rod and at its other end to the casting, the connection being substantially as shown in Fig. 4 of the patent, that is, at one side of the pivotal axis. 'The rack rod being supported substantially in said plane.' 'Said plane' means the pivotal plane of the pivots, and if Fig. 1 of the patent is noted, it will be seen that the rack rod itself extends in vertical alinement with the pivots where the casting is connected with the scale beam, the rack rod being in alinement with the pivot and the weighted part of the casting, and also the point of connection with the spring or the casting being at one side of this vertical plane, thereby giving the space for the flexure of the spring while maintaining the rack in the horizontal plane of the pivots. I find this construction and location of parts are in all the exhibits to which I have referred operating and arranged in substantially the same way.

"Mr. Hibben: I offer in evidence printed Patent Office copy of De Vilbiss re-issue Patent No. 12138, re-issued July 28, 1903, and issued to the Toledo Scale and Cash Register Company, and ask that it be marked Defendant's Exhibit 63.

"Mr. Zane: I suppose it is claimed the Toledo Scale and Cash Register Company is the defendant?

"Mr. Meads: Yes, it is the same corporation. I think there is proof in the record of that already. If there is not, it will be supplied.

1115 "Mr. Zane: We object to it as irrelevant, immaterial and incompetent. It has no bearing upon any issue here.

"The Master: That's the same objection I take it under which all this testimony goes in. There is nothing in your objection peculiar to this particular patent?

"Mr. Zane: Well, this particular patent is on its face for a particular kind of a scale, it is for a fan scale, and it could not have any bearing upon this issue because, if they built this kind of a scale, they would not build this kind of a scale. (Indicating Exhibit 55.) In other words, the things are directly contrary to each other.

"The Master: I will admit the patent subject to the objection the same as I have admitted other testimony of this same class.

(Said re-issue Patent No. 12138, so offered, received in evidence and marked Defendant's Exhibit 63.)

Mr. Hibben:

"Q. Please examine this re-issue patent, Exhibit No. 63, and make the same comparison of the structure which you find disclosed therein with the Defendant's cylinder scales as shown by the exhibits which you have been considering.

"A. This patent, Exhibit No. 63, discloses a particular form of pendulum mechanism, in which certain adjustments were made to bring the pendulum and associated parts——

"Mr. Zane: There is one objection I ought to have offered here, and that is this thing is already in the record. What are they encumbering the record with two copies of it for?

"The Master: The same patent?

"Mr. Zane: Certainly. They offered it on the main case.

"The Master: Of course, if the patent is already in the case, there is no need of offering it again. It may stand. It will be harmless even if it was introduced in the original case.

"A. (continued.) —to a new position to aid in balancing the scale mechanism. The means for adjusting the pendulum mechanism has been found to be necessary——

"Mr. Zane: Move to strike out his statement as to what has been found to be necessary.

"A. Cancel 'has been found to be' and make it 'is necessary' for different weights of platforms are used and different weights of supports for the platform and lever are used, the pendulum mechanism being employed in connection with the weight as shown at '*a*' in the

1116 drawings of the lever itself are used to normally offset the weight of this platform and supporting lever, and the adjustment of the pendulum is made to bring the indicating mechanism to zero position with the various weights of platform support-

ing levers. Also during the operation of the scale if at certain points of the chart the weight is not correctly shown, the pendulum mechanism may be adjusted so that it will offset weights in correspondence with the weights indicated on the chart. The particular pendulum adjusting means substantially as described in this patent is found in all the exhibits to which my attention has been called including the Plaintiff's Exhibit Defendant's scale.

"Q. Please compare the claims of this reissue patent, Defendant's Exhibit No. 63, and compare the elements expressed therein with any corresponding elements which you may find in Defendant's Cylinder scale shown by any of the exhibits herein.

"A. Well, I find that the subject matter of Claim 16 is found in all of the exhibits to which I have referred, in fact to all to which my attention has been called. Claim 16 includes 'In a scale, the combination with a table and a scale beam.' All of the exhibits to which I have referred have the table and scale beam. 'Of an index co-operating with said table'—all of them have an index which co-operates with the table. 'And a pendulum moving with said index"—all of them have a pendulum which moves at the same time with the index.

"A link carrier connected with said index and pendulum'—the link carrier is found in all of the exhibits and has been variously designated as a cam or an eccentric segment, the term 'link carrier' being used herein. 'Means for adjusting said link carrier concentrically with the pivotal support of the index and pendulum and relatively to the pendulum'—all of the exhibits have the means for adjusting this cam or eccentric segment concentrically with the pivot of the pendulum, and of course this swings it relatively to the pendulum. 'And a link connecting said carrier with the scale beam'—all the exhibits contain this link which is shown in Exhibit 55, or which is shown in all the exhibits, put it that way, of the flexible band or ribbon which connects the scale beam and cam with the link carrier substantially as described. All of the mechanism to which I have referred in these various exhibits operate substantially as described in this claim.

"Q. Specify the exhibits which you have referred to in
1117 your last answer as showing the employment of the structure or elements mentioned in Claim 16.

"A. All of the exhibits to which my attention was called yesterday and including Defendant's Exhibits 50 to 58 inclusive, and also the machine marked "Complainant's Exhibit Defendant's scale, in other words, all the exhibits to which attention has been called.

"Mr. Zane: By the word 'index' you meant index hand, did you?

"A. I did not.

"Mr. Zane: What did you mean?

"Mr. Meads: You will have a chance to cross-examine. I object to a cross examination at this point.

"Mr. Zane: He used a word there. I just asked him what he meant. 'Index' is the word he used.

"The Master: What is the question, as to what he means by the word 'index'?

"Mr. Hibben:

"Q. What do you mean by the word 'index' there?
"A. The word 'index' applies to the means for showing the weight upon the platform. It is not a particular form or hand or anything of that kind, it means the index, the pointing indication.

"Mr. Zane: Object and move to strike out because that's a construction of the patent.
"The Witness: The question was asked what I meant by it and I have explained it.
"Mr. Zane: That's just the point. He has meant something absolutely incompetent. He says it means something which he has in his own mind as to what it means.

"The Master: The word 'index' is used in the patent, is it?
"A. In the claim, I presume the word 'index' is used.

"Mr. Hibben: But look at the patent. You will see the only thing that's an index is this hand that revolves across their dial.
"Mr. Meads: You don't care to ejaculate again that the patent says 'index hand', the patent says 'index'.
(Discussion.)
"The Master: An expert may determine what any particular word may mean as applied to a structure. The word 'index' being susceptible of different meanings, I will deny the motion.

"Mr. Hibben:

"Q. In the course of your examination you have compared
1118 certain claims of defendant's patent exhibits with defendant's cylinder scales shown by defendant's exhibits which you have considered, and have pointed out in such scales the parts or elements corresponding to the parts or elements specified in such claims. Now, what have you to say as to the co-action and function of such parts of those scales and the result accomplished thereby as compared in those respects with the corresponding parts or elements of said claims?
"Mr. Zane: We object to that as calling for his construction of the patent.
"The Master: Objection overruled.

"A. They are precisely the same.

"Mr. Hibben. That's all."

Cross-examination.

By Mr. Zane:

"Q. The patent which was an exhibit in the case as No. 12,137, re-issued to A. DeVilbiss Jr., is the oldest patent connected with the pendulum scales that appears in evidence, is it not?

"Mr. Hibben: I object to that as irrelevant and immaterial and not proper cross-examination. That is not a scale that was mentioned on the direct examination of this witness, and this witness is not shown to have familiarity with the subject inquired about.
"The Master: Objection overruled.

"A. I see absolutely no connection between re-issued patents 12,137 of pendulum scale and Exhibit—

"Mr. Zane: Move to strike out the answer as not responsive.
"The Master: Motion denied.

(Question read.)
"A. This patent is not connected with the exhibit in question as far as I can see.

"Mr. Zane:

"Q. You mean to say that the patent I have shown you which is the re-issued letters patent No. 12,137, issued to Allen DeVilbiss Jr., is not connected with a pendulum scale?
"A. It is connected with a pendulum scale, yes.
"Q. Now, that pendulum scale is a scale that weighs by means of the use of a pendulum, does it not?
"A. Yes.
"Q. It is a scale that has a dial chart, does it not?
1119 "A. It has what we call a fan-shaped chart, stationary dial, yes.
"Q. And that chart is a chart across which an index hand rotates for the purpose of indicating weight, is it not?
"A. Yes.
"Q. Now, the re-issued letters patent 12,138, is also in connection with a pendulum scale, is it not?
"A. It is.
"Q. That is a pendulum scale that has a dial chart?
"A. Among the ones would be a dial chart.
"Q. I am drawing your attention to the drawing.
"A. The picture discloses a dial chart, yes.
"Q. And it is a computing chart.
"A. It shows a computing chart, yes.
"Q. And the weights are indicated by an index hand revolving across the face of the dial?
"A. They are.
"Q. The patent Exhibit 37, is for a scale which has a pendulum, has it not?
"A. It has.
"Q. And the pendulum is of the same general construction as the pendulum indicated in re-issued letters patent No. 12,137 and 12,138?
"A. The illustration of the two are materially different, but by general construction if you mean a pendulum which rises from a normal pendant position to an upright position, I would say yes.
"Q. Now, in re-issued letters patent No. 12,137 and re-issued

letters patent No. 12,138, the plane of the pendulum described when the pendulum moves is the same plane in which the dial stands, is it not?

"A. Substantially so, yes. They would be in parallel planes.

"Q. Well, they certainly would be parallel planes?

"A. Yes.

"Q. Now, in the patent, Exhibit No. 37, the plane, perpendicular plane passing through the axis of the indicating mechanism is not the plane in which the pendulum moves when it is indicating weights, is it?

"A. It is not.

"Q. A perpendicular plane passing through the axis of the indicating mechanism, that is, the cylinder, stands at right angles to the perpendicular plane which describes the plane in which the dial moves when it does move?

1120 "Mr. Meads: I will have to object to that question. Counsel has prevented on direct examination this witness from telling what the construction of the patent is, the patent itself, he has objected and we were shut out from that entirely on the theory that he could not tell what the construction of the patent was. He could merely tell the application of the patent to a particular device. Now, counsel takes one part of a drawing and says such and such a part does such and such a thing, is that not true?

"Mr. Zane: I am drawing his attention to the drawings.

"Mr. Meads: No, that's not your question.

"The Master: I think the rule would be different as to cross examination and direct examination in that respect anyway.

(Discussion.)

"Mr. Meads: I withdraw the objection, I think the court is right.

(Question read.)

"The Master: Can you answer the question, Mr. Frye?

"A. I would say that in the illustration in Figs. 1, 2 and 3, the construction is as he has described.

"Mr. Zane:

"Q. Now, in the scale which is Complainant's Exhibit of Defendant's scale, is the plane, perpendicular plane in which the pendulum moves, at right angles—or the same plane or a perpendicular plane parallel thereto which passes through the axis of the indicator called the drum?

"A. It would be substantially parallel thereto.

"Q. And they are probably along the same perpendicular plane, are they not?

"A. Why, I could not tell from here, but practically the same, yes; they are certainly in parallel planes.

"Q. So that one difference between the scale drawn in Exhibit 37 and the scales of the defendant, cylinder scales of the defendant which are exhibited here in evidence, is the fact that the perpendicular plane of the axis of the cylinder is at right angles to the perpendicular plane in which the pendulum moves in exhibit 37, while

in the scales in evidence they are either the same plan or substantially parallel?

"A. If you confine the question to the illustrations, I would say, yes.

"Q. Now, in the original patent No. 12,137 do you find any claim that is other than a combination member?

"Mr. Meads: That's not one of the patents—12,137. If it is for the purpose of testing his accuracy as an expert, why I suppose——

1121 "The Master: Yes.

"A. Might I see what you mean by original patent?

"Q. (Hands witness bound volume in which appears Patent 12137.) 12,137.

"A. Well, in patent terms a re-issued patent differs materially from an original patent. I wondered whether we understood the same thing.

"Q. Yes, 12,137.

"Mr. Hibben: Which is a re-issued patent.

"A. You don't mean the original of this re-issue?

"Mr. Zane: No, that's been supplanted.

"A. Apparently all the claims herein relate to a combination of elements.

"Q. Now, in patent 12,138 which is marked as Defendant's Exhibit 63, is there anything other than a combination in any of the claims?

"A. These claims all relate to combinations of elements.

"Q. In the patent which is marked as Defendant's Exhibit 37, is there any claim for anything else than a combination?

"A. These claims apparently specify combinations of elements.

"Q. In the patent, the older patent, 12,137, re-issued patent, do you find any rack and pinion for the purpose of revolving the indicating mechanism as disclosed by the drawing?

"A. There is none shown in the drawing.

"Q. Is there any shown in re-issued patent No. 12,138 which is Defendant's Exhibit 63?

"A. There is none shown in the illustration.

"Q. In either of the claims of those patents do you find a claim for a rack and pinion to operate the indicating mechanism?

"A. I don't understand that question 'in either of the claims'.

(Question read.)

"A. To what do you refer by 'either of the claims'?

"Q. Either or any of the claims in the re-issued patents numbered consecutively 12,137 and 12,138?

"A. I must say I still don't understand the question. Do you mean do I find any wording wherein is specified a rack and pinion?

1122 "Q. Yes, in either of the claims in those two re-issued patents which I have drawn to your attention.

"A. You want to know if the words 'rack and pinion' are included. I see no specific mention of a rack or pinion which, as I understand it, is what is inquired about.

"Q. Now, in the patent which is Defendant's Exhibit 37, you see a drawing which indicates a rack and pinion for the purpose of operating the indicating mechanism, don't you?

"A. I do.

"Q. Now, in the drawing which is shown in the two re-issued patents which I have drawn to your attention it appears that the indicating mechanism that moves is an index hand moving across a stationary dial?

"A. That is the selected form illustrated in these drawings, yes.

"Q. In the patent, Exhibit 37, it is the mechanism with the indicator figures on it that moves past a fixed point for the purpose of indicating weights and values, is it not?

"A. That is the form selected in the drawings of this patent, yes.

"Q. In the drawings of re-issued patents 12,137 and 12,138 as they are illustrated in those patents, do you find any strap moving over a cam?

"A. That form of cam and strap to which I understand you to refer I do not see in the drawings.

"Q. In the patent, Exhibit 37, No. 829,736, is there any strap over a cam as illustrated in that drawing?

"A. Why, in the illustrations of this patent I see no strap and cam, but a link and link carrier I do see and is what I understand might be called a strap. I am not sure that I understand your question.

"Mr. Zane: Move to strike out the last part of his answer as not responsive.

"The Master: The last part is the part in which he says he is not sure he understands your question.

"Mr. Zane: The part after he answered there was no strap and then he went on to say something more, that's the part I object to as not responsive.

(Question and answer read.)

"The Master: The question is whether that is what might properly be termed a strap. I will deny the motion.

"Mr. Zane:

"Q. In the Exhibit 37 I wish you would point out the differences in the construction between the scale indicated in the drawing there and the scale which is called Complainant's Exhibit of Defendant's scale, and point out all the differences, no matter how small they may seem to you to be?

1123

"A. Well, to begin with, the shape of the base is a little different. The scale illustrated in the patent, exhibit No. 37, does not have an adjusting screw or foot; the shape of the standard is different from that illustrated; the patent does not illustrate agate bearings such

as is shown in this; the caps which cover the agate bearings are different from that shown herein; covers for the agate bearings are held on by two screws in the scales shown and are illustrated without screws herein; similarly the construction whereby the bearings are mounted on the pivots of the lever differ in the scale that is in exhibit and the illustrations of the patent. The shape of the lever is a little different, the shape of the platform is a little different, the shape of the spider supporting the platform is slightly different; the location of the box in which we put or in which is put weights for offsetting and counterbalancing the mechanism which is commonly called the shot box is shown in the scale and is not illustrated in this drawing of the patent. Similarly the shape of the—well, the means for preventing packages placed on the scale from contacting with the mechanism of the scale is in the scale in exhibit, but is not in the patent as illustrated. The mechanism whereby the rod which is utilized to maintain the platform in a level position at all times is not illustrated—well, it is different from that illustrated in the patent. The patent does not show any resilien spacing members for supporting the platform. The patent does not illustrate any dash-pot, the shape of the housing in the patent—well, before I leave the housing, cancel that. The patent does not illustrate any spirit level which is contained in the exhibit referred to. The shape of the housing of the exihibit, Complainant's scale, is different from the housing illustrated in the patent. The location of the connection to the stirrup is different in the patent and the scale exhibited.

"Q. Where do you find the stirrup in the drawing for Exhibit 37?

"A. By 'stirrup' I refer to the connection by which the rack rod is connected with the beam. I find it at the point No. 90 in the drawing.

"Q. What is numbered 90 in the drawing is what you call the stirrup?

1124 "A. Well, that is the point at which the connection of the rack rod and the beam is made.

"Q. Now, what is the difference between the point of connection, what is the difference between the two things as to the point of connection?

"A. One is pivotally connected by means of a screw and the other is connected with a cone pivot.

"Q. Which has the cone pivot?

"A. The scale in exhibit.

"Q. All right, go on?

"A. The mounting of the pendulum is in a different place in the scale from that exhibited in the drawings of the patent. The link and link carrier of the scale exhibited is different in form from that shown in the patent. The patent shows no agate bearing for mounting the pendulum, nor does it show any thrusts to prevent the pendulum pivot from moving sidewise, nor does it show any of the means employed in the scale exhibited for rotating the link carrier. Also the mounting of the agate bearings within the housing is dif-

ferent from that illustrated; the patent in suit shows no glass plates such as are embodied in the scale, also no scrolls surrounding the glass plate. The moving of the cylinder within the housing is in a different location in the scale than from that shown in the patent; the bearings upon which the cylinder rests are different in the scale than shown in the patent; the slots through which the indications are exhibited to the customer are different in shape and use from that shown in the patent. The patent shows no magnifying glass or enclosing glass or scrolls or indicating mechanism such as are employed in the scale beam. There is no—well, the customer's indications at the rear of the scale exhibited are different from that shown in the patent. The patent shows none of the markings such as the words, for instance, on the scale exhibited. The patent does not show the particular form of spacing members that are used in the cylinder and casing, nor does the patent show the same kind of end covers that are used in the scale exhibited, nor does the patent show the spacing sleeves surrounding the rack rod which are in the scale. There may be one or two other minor differences that I have overlooked, but I have tried to include the differences.

"Q. Now, in Complainant's Exhibit of Defendant's scale, what do you call the scale beam?

"A. The member upon which the platform is supported.

1125 "Q. And that is the member, as you call it, which is weighted at one end apparently.

"A. It is, yes.

"Q. That is the scale beam?

"A. That is the scale beam.

"Q. Now, in Complainant's Exhibit of Defendant's scale, when a weight is put upon a scale and the scale beam is put into motion, how is that motion communicated by the rod below the scale beam? What do you call that?

"A. That is what we call the check rod, the beam for keeping the platform in a normal, level position.

"Q. Yes. Now, does that communicate motion in any way?

"A. No.

"Q. That check rod?

"A. No, it moves, the check rod in the exhibit scale is one in which connection is made with a fixed point, a point in parallelogramatic relation of the pivots between the fulcrum and the platform supporting the pivots so as to always maintain the platform in level position no matter through what curve the lever is moving.

"Q. Now, the pendulum is attached to the scale beam by means of what you call a stirrup, is it not?

"A. The immediate part in contact with the scale beam I have called a stirrup, yes.

"Q. And that passes into the strap, does it not?

"A. Well, the flexible link is connected to the other end of the stirrup from which the beam is connected.

"Q. Well, call that the strap, and that strap moves over a cam and the pendulum is attached to the cam?

"A. Yes, if by a strap you mean the flexible link and by cam you mean the member carrying the link, I would say yes.

"Q. Well, you know what the cam is, don't you?

"A. I believe I am referring to the same part you are, to the member to which the upper end of the flexible link is connected.

"Q. Yes, and over which the strap lies.

"A. The link passes over the arcuate face there, yes.

"Q. So that the communication of motion on this scale is that when a weight is placed upon the platform the scale beam is moved and as it moves it depresses the stirrup, the stirrup pulls down the strap, the strap pulls over the cam, actuates the cam and the cam actuates the pendulum?

1126 "A. Through the intermediate mechanism the pendulum is raised to offsetting position when a commodity is placed on the platform. I presume that's what you mean.

"Q. Now then, in this drawing for your patent, 839,736, which is exhibit 37, when a weight is placed upon the scale the motion is communicated to the scale beam, is it?

"A. Yes.

"Q. Does the scale beam at the end under the cylinder when a weight is placed upon the scale become elevated or depressed?

"It becomes depressed.

"Q. And how is the motion communicated from the scale beam to the pendulum?

"A. Through the link 11 and the link carrier which is attached to the pendulum.

"Q. Yes. That link which you speak of is not a flexible strap, is it?

"A. It is hard to tell from the illustration, it is shown in straight lines.

"Q. Shown in straight lines. It passes over and is hooked onto a hook at the end of a fixed member projecting from the disk, is it not?

"A. That is apparently the construction because if you look at Fig. 2 11 is shown as having straight lines at the top at right angles to those which are shown in Fig. 1.

"Q. Yes.

"A. Now, that may be a hook as you have described or it may be a stirrup or it may be a flexible band, it is hard to tell from the illustration.

"Q. You can see it is a hook there, can't you?

"A. I don't understand what you mean by hook?

"Q. Very well. Now, is the disk in the patent, exhibit 37, an eccentric disc?

"A. Why, I could not tell that without measuring.

"Q. Yes. Now, go down to the illustration, Figure 3. There is illustrated in this patent 839,776, exhibit 37, the cylinder, is it not?

"A. The cylinder is shown as mounted within a casing, yes.

"Q. Yes. Are you able to see from that chart arranged on that cylinder that the calculated values are put opposite certain weights?

"A. Why, only in one line could I see the item.

1127 "Q. Well, you see it in one line?

"A. In one line they have a weight numeral and in parallel relation with that weight numeral are various numerals which are for the computations.

"Q. Indications of values?

"A. Yes.

"Q. And you see that the slot is only wide enough to show one row of figures, don't you?

"A. Only one row of figures has been illustrated therein.

"Q. Well, you see that as that thing is illustrated and constructed there the slot will only indicate one row of figures?

"A. It only does illustrate it. I don't know whether it only would or not.

"Q. And that one row of figures is opposite a weight of thirteen ounces, is it not?

"A. I presume that's ounces, yes, it is opposite thirteen, anyway.

"Q. It is opposite thirteen?

"A. Yes.

"Q. Now, when this cylinder rotates as you stand looking at it does it rotate towards you or away from you?

"A. That's a hard question.

"Q. Why, look at your weight?

"A. The weight on one place is such that it will move so that the point now on top will move to the bottom.

"Q. Yes.

"A. But there is another weight at the middle which has the parts in inverse order in which the thing will move so as to show the same weight in the different places.

"Q. Don't you see those weights in the middle are indicated on the other side to the customer?

"A. Exactly. Which side are you referring to?

"Q. I am referring to the side you looked at when you went to the scale. Now, looking at the side that you weigh at as you are operating the scale, those weight indications on the cylinder will move towards you, won't they?

"A. Why, those that are normally at the top will move toward and those that are normally at the opening will move away from you.

"Q. Yes, but the cylinder in its rotation will keep coming towards you, won't it?

1128 "A. That part at the top will keep coming towards you and the other part will keep going away.

"Q. Yes. Now, on your scale does the cylinder rotate that way or the other way?

"A. In this scale, exhibit 55, apparently the rack rod is on the opposite side so as to rotate it to bring the bottom portions towards you?

"Q. Yes. And it is also true with the Complainant's Exhibit of Defendant's scale, of course?

"A. The rack rod here is on the same side of the pinion here, yes.

"Q. Why didn't you point out that difference between the scale illustrated in Exhibit 37 and——

"A. I considered it so immaterial it never occurred to me.

"Q. You considered that immaterial?

"A. Absolutely. You asked me why, that is the reason.

"Q. Now, do you see any difference between the scale illustrated in Exhibit 37, in the drawings there, and the scale of Defendant, which is called Complainant's Exhibit of Defendant's scale in regard to the relative points at which attachments are made on the scale beam?

"A. Why, to what members do you mean by attachments?

"Q. Any attachments made?

"A. Well, the platform is attached to the scale beam in substantially the same position, the pendulum is attached to the scale beam in substantially the same position, the rack rod is attached to the scale beam at a position extending laterally from the connection to the pendulum, while in the patent it extends in a more or less longitudinal direction.

"Q. In the scale illustrated in No. 839,736, where as between the pendulum and the rod supporting the platform is the rack bar attached?

"A. Why, it is attached at the point marked 90 in Figs. 1 and 2.

"Q. That is between the pendulum and the bottom of the platform, is it not?

"A. Why, yes, it is so shown.

"Q. On your scale, that is, Complainant's Exhibit of Defendant's scale, where is the rack bar attached?

"A. Why, at one side of the connection with the pendulum.

"Q. What connection with the pendulum?

1129 "A. The point where it connects with the part which we have been calling the stirrup.

"Q. At the side of the point where the pendulum is connected with the stirrup?

"A. Where the beam is connected with the stirrup."

GEORGE R. FRYE, resumed the stand for further examination:

Cross-examination.

By Mr. Zane:

"I don't remember the De Vilbiss patent No. 621,297 by number though I have seen most of the De Vilbiss patents. Now that you have shown me a printed copy of the patent, I recognize that this is one that I have seen before.

Mr. Hibben: As I recall, I objected to all reference to that patent when the witness was being examined at a previous session on the ground that it had not been introduced in evidence, was irrelevant and had not been referred to and was going entirely out-

side of the scope of the direct examination. The witness was simply asked to take certain patents and compare them with the scale, the cylinder scales in controversy in this case, and to state whether the invention in those patents is embodied in those scales. If it is a test of the witness' ability for expert knowledge, I think that has been carried to the extreme.

The Master: Whatever the purpose may be, I think it is admissible on cross examination to test the knowledge of the witness and his familiarity with patents and especially patents relating to scales. Objection overruled.

(Question read.)

Mr. Hibben: I make the further objection that the document itself is the best evidence of its contents. We were not permitted by this expert witness to tell what the patents disclosed.

The Master: That's simply a general recital for getting at another fact.

Mr. Hibben: We were not allowed to go into that to any extent.

The Master: Objection overruled.

1130 "This patent shows a pan suspended from a beam which is carried upon the scale base. A hanging scale is usually one in which the entire scale is suspended. This patent does not show what is technically called a hanging scale. The specification of the patent states that the scale is adapted to be changed into the well-known platform type of scale by changing the structure slightly. All of the claims in this patent are for combination of elements.

"I remember answering questions about the Reissued Patent No. 12137, but I do not remember now whether that was an exhibit in the record of this case. I think I have examined the original patent, No. 649,915, of which this patent is a reissue. I see from the drawings of the printed copy of the Reissued Patent, 12137, that the structure disclosed contains a dash-pot and a tare beam. All the claims of this patent are for combinations of elements. I find no mention in the specification of this patent about the graduation on the chart being uneven, and I see no particular spacing on the drawing such as would indicate that it was uneven. From my knowledge of scales I know that the pendulum travels at a different rate in different parts of the arc, provided the arc goes far enough, but if the arc is comparatively close to the center and the arc is on equal sides of a median line, the graduations are substantially even for a small space. In a scale that we started just two years ago they have merely the pivot left small so they need no corrective device to overcome the ununiform movement of the pendulum. In Exhibit No. 55 they use an eccentric segment or link carrier over which there passes a strap or link, and the relation of the radius of the eccentric segment is in direct proportion of the travel of the pendulum throughout the great arc. It comprises the concentrically adjustable member 100 which carries the pivot 10 which is connected with the scale beam. It is true that there is a means there of making the movement of the pendulum such that the graduations of weight on the chart for a pound

is the same all the way across the chart, provided the travel is kept within definite ranges. In Reissue No. 12,137 I see in the drawings no eccentric segment and strap.

"I have testified with reference to the Reissued Patent No.
1131 12138—Defendant's Exhibit No. 63. The original patent from which this was reissued was No. 674,646. In that patent I see a part which is disclosed in the specification as being for the purpose of placing the initial and end positions of travel of the pivot on equal sides of the median line, which, in my opinion, will have the same effect as the cam or segment, such as is used in Exhibit No. 55. The concentrically adjustable member marked '100' which carries the pivot '10,' connected with the scale beam, will correct for the uneven travel of the pendulum, provided they keep that travel within a definite range. The amount of travel is in proportion to the tangent of the angle, and at either side of the median the tangent and the curve are substantially the same within short limits. Whether or not in the range of travel shown in this Reissued Patent, 12138, the pivot adjusting mechanism I have described is sufficient to overcome the uneven movement of the pendulum I would have to experiment to determine. I think it will, but I would not like to say positively without making the experiment. The drawing of this patent does not show any eccentric segment and strap. The link shown in this Reissued Patent, 12138, differs from the link shown in the Reissued Patent, 12137, in that in this patent the lower extremity of the link is formed as a knife edge and at its upper extremity it passes over the pivot, 10, which is formed with a knife edge, the pivot, 10, being mounted upon the concentrically adjustable portion, 100. In the Reissued Patent 12137, apparently, the link, at its upper extremity is formed with a knife edge, but it is impossible to determine from the drawing whether at the lower end of the link there is a knife edge or not. There is apparently a stirrup used in this Reissued Patent No. 21237—that is, a member encircling the inner end of the scale beam at the point where the scale beam is connected with the link. A hook differs from a stirrup in that the hook does not make a complete enclosure. The extent of travel of the index hand is probably greater in the Reissued Patent No. 12138 than in the Reissued Patent No. 12137, though the direction of the travel of the hand across the chart is the same in both.

Next referring to the patent No. 667,652—Defendant's Exhibit No.
38—this patent was issued on February 5, 1901, to De Vilbiss.
1132 This date of issue was about two or three months after the date of issue of the original patent from which the Reissued Patent No. 12138 was reissued. The original patent from which the Reissued Patent No. 12137 was evolved was issued in 1900.

"In this patent, Exhibit No. 38, there is a dash-pot mechanism shown, and either a stirrup or a hook, I cannot tell from the illustration. I see no specific element which is mentioned as being for the purpose of overcoming the eccentricity of the movement of the index hand, but the extent of travel there is such as I would determine not to require such correcting element. This scale is shown

with a tare beam. All of the claims of this patent are apparently for combinations of elements.

"Referring now to the Exhibit No. 37, the De Vilbiss cylinder scale patent, I find that the purpose of this patent is pointed out in the third paragraph of the specification as follows: 'To this end the present invention consists of a construction of parts which shall adapt the indicating mechanism above described and the weighing mechanism to joint use in the simplest manner and whereby all necessary adjustments are permitted.' The indicating mechanism above described is expressed as 'Preferably by means of a cylinder rotating on its axis within the casing.' The weighing mechanism is stated to be the same mechanism previously invented, for it says, 'combined with a weighing mechanism substantially as covered by the patents heretofore issued to me in this line of invention.'

"Referring now to the patent shown in Exhibit No. 39, I notice that this patent is said to be an improvement on the patent No. 621,297, which was the one you called to my attention as having a hanging platform suspended from the beam. All the claims in this patent, Exhibit No. 39, relate to various combinations of elements. The structure shown in this patent lontains a dash-pot and a tare beam. There is no tare beam at present attached to the exhibit scale, Defendant's Exhibit No. 55 or Complainant's Exhibit Defendant's Scale, and I do not know that either of these scales ever had a tare beam on them, though both are adapted to have tare beams.

"Next referring to the patent, Defendant's Exhibit No. 47,
1133 I note that all the claims therein appear to relate to various combinations of elements.

"Next referring to the patent, Defendant's Exhibit No. 59, the arbor is shown in the patent as the part designated by the numeral 125. In the scale, Defendant's Exhibit No. 55, the arbor is shown as the part surrounding the pendulum pivot. It is directly behind the circular disk, at which I am not pointing, but the scale would have to be dismantled to show the arbor clearly. This arbor is also present in the scale called Complainant's Exhibit Defendant's Scale. It is the part to which I am now pointing, adjacent to which the pendulum pivot is usually mounted—the round piece of brass in which the pendulum pivot rests.

"Next referring to the patent No. 1,142,165, Defendant's Exhibit No. 62, this patent relates to the shock absorber. All the claims of this patent appear to be directed to combinations of elements.

HALVOR O. HEM, a witness produced on produced on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am 52 years of age and reside in Toledo. I have been Consulting Engineer for the Toledo Scale Company since the 1st of October, 1916. Before that—from 1890 to 1916—I was connected

with the Strait Scale Company and Strait Manufacturing Company, as Superintendent and Chief Engineer. Before 1890 I was a contractor, building houses. For the last 27 years I have devoting my time to the building of scales. We started in 1890 to build what were known as the Monarch scales, and we got up a fairly complete line of scales, including scales designed to weigh up to 300,000 pounds. I also designed a full line of cooperage machinery in addition to the scale business. I have also built a complete line of steam engines from 60 horse power to 1,000 horse power. The Monarch scale which we first manufactured, was sold out to the Fairbanks Company. We continued manufacturing these scales for the Fairbanks Company for three or four years, and after that I
1134 designed the Strait scales—the line consisted of scales from 600 pounds to 200 tons capacity.

"My duties with the Strait Scale Company included the designing of the various machines, including the scales, which we built, and I also had charge of the factory wherein the scales were made. Since I have been with the Toledo Scale Company, I have spend practically all my time designing scales.

"I am familiar with the type of scale known as the automatic, platform, weighing and computing scale, having to do with designing scales of that kind during the time I have been connected with the Toledo Scale Company.

"From the knowledge which I have acquired from the time I entered the Strait Scale Company, up to the present time, I can state the various elements which enter into the structure of what is known as an automatic, platform, computing scale."

(Objection was made to the following testimony, as having nothing to do with this inquiry, but the Master decided that he would take the testimony subject to objection.)

"The elements necessary to an automatic platform computing scale are:

"Proper counterbalancing means to properly counterbalance the load so that the indicator will register the same with the same load on the platform, regardless of the temperature or atmospheric condition.

"Next, lever or levers for supporting the platform and connecting it to the counterbalancing force.

"Next, base and fulcrum bearing for the lever.

"Next, the platform and stabilizing means. In scales with one lever, where the platform is only mounted on two bearings, it is necessary to have a check link so as to hold the platform horizontal regardless of where the load is placed on the platform—whether the load is adjacent to one edge of the platform or the other. The stabilizing means are some means to hold the platform in a horizontal position regardless of where the load is placed on the platform.

"Next, means for checking the oscillation of the indicating device and the levers in the scale.

"Next is the indicating devices.

1135 "Next, means for accurately actuating the indicating device.

"Next the mounting of the indicating device, that is a suitable support for the indicating device.

"Next, a casing for enclosing or housing the indicating device.

"Q. Now, these nine elements—I think you have given nine, is that right?

"A. Yes.

"Referring now to the cylinder scale before me, Defendant's Exhibit No. 55, the counterbalancing means is the pendulum which swings outwardly and upwardly, as the load is placed on the platform.

"The element No. 2 in this scale is the one lever which carries the platform.

"The element No. 3 is present. This is the base and this is the fulcrum bearing.

"The element No. 4 is present. This is the platform which, in this case, first, has a spider resting on the load pivot and a platform resting on the spider. The stabilizing means consists of the post extending down from the spider on which is the platform through the base with the check link from this post back to a stationary part of the base. In this case that post is fastened to that fulcrum bracket.

"Means for checking oscillation the 5th element is the dash pot consisting of a cylinder filled with liquid, having a piston and a stem or rod connecting with the scale lever.

"The 6th element is the indicating device—is the cylinder for indicating the weight and value computations.

"The element No. 7 for actuating the indicating device consists of a member inside of the housing, which we can see very well from the outside. It is connected with the scale lever, extended up through this pipe or tube; the upper end forms a rack meshing with a pinion fastened to the shaft on which the cylinder is mounted.

"The 8th element is present—mounting of the indicating device. It consists of castings with upward projecting brackets on either end of this drum on which are journaled or which form the bearings for the indicating device—two discs mounted with their axes a short distance apart horizontally and their edges overlapping, and the

1136 shaft of the indicating drum rests on the periphery of the disc in the space between the two discs at the periphery.

"The 9th element is the casing for enclosing that indicating device—the housing which encloses the indicating cylinder."

Cross-examination.

By Mr. Zane:

"I am familiar with the scales which the Toledo Scale Company have been building, but not with their patents. I have no recollection of ever seeing the original De Vilbiss patent for a computing scale.

This patent which you show me, No. 621,297, purports to be issued to Allen De Vilbiss, Jr., of Toledo, Ohio. It shows a hanging pan, which I would have difficulty in replacing with a platform, because no lever is shown in this scale in position to support a platform. The pan is hanging from a lever in Figure No. 2 of the patent. The lever may be called the scale beam in this instance. It is the beam of the patent marked with the letter A. I cannot determine from this drawing whether the counter-balance of the scale is the member marked J. I can't see what is the counterbalance. The base of the scale in this patent would be the foot of the casting that supports the lever. The fulcrum bearings of the beam are those bearings through which the pan is supported at B. I do not see any stabilizing means for the platform in this drawing. There may be some means, but I don't see it. The indicating device in this patent is the index-hand, which is actuated to move over the indicator. I am unable to tell where the mounting for the indicating device would be, from the drawing. I can see a frame, but I don't see the point on it where the indicating device is mounted. The same elements that I have enumerated as essential are necessary in an automatic scale in which the index-hand moves over a stationary chart, as in a scale where the chart moves past a fixed indicator.

"Referring to the Reissue Patent, #12138, Exhibit No. 63, this scale may have all of the nine elements, but they are not all shown in the patent drawing. For instance, the stabilizing means for the platform, and the dash-pot for checking the oscillation of the
1137 indicating hand are not shown in the drawing. In that patent, Exhibit No. 63, my first element, a counter-balance, is shown as the pendulum, No. 9. The second element, the lever, is shown as the lever No. 1. My third element, ba e and fulcrum bearings is shown with the base marked as A, and the fulcrums as No. 2. My fourth and fifth elements are not shown in the drawing. The sixth element, the indicating device, is the dial chart marked No. 30, and the index-hand marked No. 91.

"The next element, 'Means for actuating and indicating device,' is indicated by No. 11. The next element, "The mounting for the indicating device' is shown at No. 7, the bearing around which the pendulum oscillates.

'The next element, 'The casing to enclose the indicating device' is shown at No. 130. The pendulum in the scale shown in this drawing is apparently actuated through a link mechanism, not through a rack and pinion. The indicating chart is stationary and the hand revolves across the chart.

"I have no recollection of ever having seen the patent No. 839,736, Defendant's Exhibit No. 37. In the drawing shown in this patent my first element, the counter-balancing means, is shown by the pendulum, No. 9. The second element, the lever, is shown as the main scale beam, No. 1, which supports the platform. The third element, base and fulcrum bearings—the base does not seem to be marked by any numeral, but is the base on which all the mechanism rests, while the fulcrum bearings are shown by No. 2. The fulcrum bearing is adjacent the outer end of the scale beam and the platform is supported between the fulcrum and the inner end of the beam.

"My fourth element, platform stabilizing means, is not shown, but there appears to be a rod going down below the platform, which I would infer is connected below the base with a check rod. I do not see any means for checking oscillation shown on the drawing. There is none shown. The scale lever in Exhibit 55 is arranged with a heavy weight at its outer end for the purpose of reducing the initial pull on the pendulum. The scale lever is perhaps overbalanced on that scale. This heavy weight at the outer end of
1138 the scale beam operates by having a tendency to balance the weight on the platter and the other end of the lever. By so counterbalancing the weight of the platform and other parts, you reduce the initial pull, or unbalanced pull, on the pendulum. This is not essential in the operation of the scale. The only essential part for counterbalancing the load is the pendulum, but it would be possible to construct the lever supporting the platform in such manner as to eliminate all initial pull on the pendulum due to the weight of the platter and the levers. In this scale, as the scale without any weight balances at zero, the things that counterbalance the weight on the platform and spider are the location of the weight in the middle of the lever, the pendulum and the atmospheric pressure. The effect due to the atmospheric pressure is that if the platform was made of a light enough substance, it would float so as not to produce any initial pull of the pendulum.

CHARLES C. NEALE, a witness called on behalf of the defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am 43 years of age and reside at Minneapolis. I am the Commissioner of Weights and Measures for the State of Minnesota. For the last 25 years I have been employed by that State in connection with scales, serving at first under a gentleman who was then the State Scale Expert. During the first of my service I was directed to spend my time with the local Fairbanks Scale Company repair shop, in order to become qualified to serve under this expert and eventually take his place. The first year I spent practically all my time in this repair shop. After that, I continued in his service as assistant until 1896, at which time he died and I was appointed his successor, with the title of 'State Scale Expert of the State of Minnesota.' I continued in that service, testing scales, railroad scales, grain scales, and various kinds, until 1911—at which time the State Department of Weights and Measures was established, and I was appointed as Commissioner of Weights and Measures, which position I have continued to hold up to the present time.
1139 The shop of the Fairbanks Company, in which I was employed, was a regular Fairbanks selling agency, which sold scales generally, and other things made by this company, and I

worked in the repair shop, learning how to pivot and align scales and sell scales.

"From the knowledge I have acquired in my profession and occupation, I can state the elements which enter into the structure known as an automatic platform computing scale."

(The following testimony was taken subject to objection by counsel for plaintiff.)

"I would say the necessary elements are:

1. A base supporting the weighing mechanism and other working parts.

2. A system of levers fulcrumed to the base.

3. A platform properly superimposed on the levers.

4. Means to connect the levers with the counterbalancing device.

5. Means for stabilizing or holding the platform in proper upright position.

6. Means provided to limit the horizontal motion of the platform.

7. A counter-balancing device to act reciprocally against the load.

8. Means for actuating an indicating device.

9. The indicating device, showing weight and value computations.

10. Proper mountings for the indicating device.

11. Housing for protecting the indicating device and other delicate mechanism.

12. Means to absorb the shock of load impact, and limit the oscillation of the indicating means.

"After examining the cylinder scale before me, Defendant's Exhibit No. 55, I would say that all of those elements are contained in that machine. Similarly, in the scale marked Complainant's Exhibit Defendant's Scale, all of these elements are present, except that a part of the enclosing housing is removed from one end."

Cross-examination.

By Mr. Zane:

"The simplest form of weighing device that I know of is the old-fashioned steelyard scale. The even-balance scale is also a
1140 lever of the first class, and I would call that equally simple with the steelyard scale. The necessary elements is an even-balance scale are a base to support the indicating mechanism, a fulcrum to support the lever, an even-armed lever on either end of which is superimposed a beam or platform, and a stabilizing device to hold the platform in proper upright position. We overcome oscil-

lation in scales of that type by the construction of the lever itself, having the center of gravity of the mass of that body closely related to the line on which the pivots are set. In some simple forms of even-balanced scales, there is provided an adjustable balance ball which changes the center of gravity up or down. I judge a dash-pot could also be used on a scale of this type, but I have never seen such a scale with a dash-pot attached. The steelyard type of scale is a hanging lever with a platform suspended therefrom. In a steelyard type of scale the support of the lever is from above, while in the platform type of scales, the lever is supported from below. I have never heard of a steelyard platform scale, but I can imagine a scale such as you have described, having a base, a support from the fulcrum pivot, a scale lever unevenly mounted on the fulcrum pivot, on the shorter arm of which is placed a platform, and on the lower arm of which is placed a counter-balance, so that the mechanism normally counter-balances at the zero point, with the indications of weight on the longer arm of the scale lever, and a slidable poise movable along the scale beam. Many times a movable weight can also be imposed on the end of the longer arm of the scale lever. That is what we call a weighing beam with a goose neck on the end. Several of the elements which I have listed as essential in an automatic platform computing scale would be present in a scale of that type, as, for example, my first elements, the base, my second, the system of levers fulcrumed to the base, and my third, the platform which is superimposed on the lever. My fourth element—means to connect the lever with the counter balancing device,—would not be present in a scale of that type, as the sliding poise on the beam acts as the counterbalance to the load. If we put a weight on the end of our beam, however, we have a counterbalance there at the end of the lever. The fifth element—means to stabilize the platform—would not be present if the platform is sus-
1111 pended from the beam, but would be necessary if the platform is imposed on the top of the shorter arm of the beam. My sixth element—means provided to limit the horizontal motion of the load platform would usually be present in a scale of that type. By this term I mean elements such as friction plates or check rods, which act to limit the horizontal motion of the pivot of the platform. Usually the casting which carried the bearing has a member against which the sharpened edge of the pivot abuts. The seven- element—a counter balancing device, to act reciprocally against the load—is present if you call the poise a counter balancing device. The next element—means for actuating the indicating device—on a scale of that kind would have to be the manual moving of the poise. The ninth element—indicating device showing weight, etc.,—would be shown in a scale of this type. There would be no indications of values, though there are some beam scales with hand indicating devices which show values. The tenth element—proper mounting for indicating device—would not necessarily be present in a steelyard scale of that type. They very rarely are, unless the scale is a small, very fine scale, though there must be a proper mounting for the graduated beam, which would be the indicating device. This mounting for the beam, however, has been

included as the fulcrum bearings. The eleventh element—the housing to enclose the indicating means—would, of course, not be present. My twelfth element—means for absorbing shock and limiting oscillation of the indicating parts—would not be present in a scale of that type, though it might be.

"If you refer to an automatic scale without any value indications thereon—that is, an automatic weighing scale only—it would contain all the elements I have enumerated, except the value computations. If you were to paste something over the value indications of those exhibit scales, you would have left a platform automatic weighing scale, but not a computing scale. The fundamental distinction between computing scales and weighing scales is that the value computations are included in the computing scale. A fundamental distinction between kinds of computing scales is that in some, the chart is stationary and the indicator revolves relatively to the chart, while in other kinds, the chart moves and the indicator is
1112 fixed. The scale before us, Exhibit No. 55, has a chart revolving past a fixed indicator.

"I have seen automotic scales with disk indicators revolving past a fixed index hand. Such a scale was known originally as the pie-face scale. I think it was manufactured in Boston, Massachusetts. It is a V-shaped adjustable chart. There was a slice cut out of the face of the scale and there was a disk revolving back of the face past a fixed indicator. The indicator was formed by the drum. It oscillated back and forth.

"Q. How do you spell that?

"A. P-i-e. There was a V-shaped slice out of the face and there we have the disc turning.

"Q. And the disc revolved and the indicator stood still there?

"A. The indicator was formed by the drum.

"Q. It didn't revolve, it simply oscillated back and forth?

"A. I forget how far the revolution was.

"Q. It oscillated from side to side, didn't it?

"A. Poise is necessary. It would come back to equilibrium when there was no load on the platform.

"Q. Now, the distinction then between this scale here and a dial scale is not necessarily in the fact as to whether the indicating chart moves or not, is it?

"A. Not so much, no.

"Q. No. What is the type of scale, what do you call it?

"A. I would call that a counter platform computing scale.

"Q. That would describe a lot of other scales. Give us a description of that scale which will differentiate it from other kinds of scales.

"A. As to manufacture?

"Q. No, no, describe it, the appearance of it, the mechanism of it. This is a cylinder scale, is it not, this contains an indicator drum, does it not?

"A. Yes, sir.

"Q. And in describing that scale you would necessarily say that

this is an automatic, platform, computing, indicator, drum scale, would you not?

"A. No.

"Q. Well, which one of those terms can you take away and still describe that scale?

1143 "A. A counter platform, computing scale describes it—automatic.

"Q. Does it descril e that drum in it?

"A. It does not describe the color of the scale.

"Q. Does it describe the drum?

"A. A counter platform, computing scale is what I see.

"Q. Suppose you had before you a dial scale side by side with this, a dial scale where the hand revolves across the face of the dial, and you wanted to describe the difference between those two scales, what would be the name you gave one and what would be the name you gave the other?

"A. Both would be in the general class of counter platform, computing scales.

"Q. Yes. How would you distinguish them?

"A. You would have in mind this scale for one?

"Q. And the dial scale for the other.

"A. Well, if I were to distinguish, I would speak of one as the dial scale and the other perhaps as the barrel shaped scale with a chart or——

"Q. Indicator drum chart?

"A. Well, I never use the term 'drum,' I guess it is all right, I would have to differentiate some way.

"Q. Well, that's the term the patent uses and that's the term the court used in speaking of it?

"A. Yes.

"Q. You would use that term then?

"A. Yes."

Dr. FRITZ REICHMANN, a witness called on behalf of the defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am 41 years of age and reside in New York City. My title of Doctor is not because I am a doctor of medicine, but a doctor of philosophy, from the University of Chicago in 1910. My specialty was physics. My education has been substantially as follows: I first took a degree of Civil Engineer at the University of Texas, and then became a Fellow at the University of Chicago in physics, being also instructor there in manual training for three years, where I

1144 organized the manual training department at Morgan Park Academy, an institution affiliated with the Chicago University. While there I studied three years at the University of Chicago.

I then taught physics for two years in the Western Reserve University of Cleveland.

"After that I became a technical expert for W. & L. E. Gurley, at Troy, New York. This firm manufactures surveying instruments and scientific instruments generally— including weighing devices. The weighing devices there were mostly standards with which to test other weighing devices, as, for example, test weights and scalers outfits. I continued in the employ of Gurley & Co. until December, 1906, when I was appointed by Governor Higgins as State Superintendent of Weights and Measures of the State of New York to inaugurate that department. During the time I was State Superintendent of weights and Measures, I took steps to codify the laws with regard to weights and measures—reviewing the old laws which were on the statutes books and drawing up statutes in place of them, and recommending the new statutes to the legislature. These new statutes were eventually passed during the several years in which I was in this position, and they established tolerances and specifications for weighing and measuring devices, and also issued regulations for the weights and measures officials. These laws were published as an official publication, and, so far as I know, was the first one of this kind in the country. Before I promulgated the codification of these laws I attempted to secure the concensus of opinion from various manufacturers. After studying and testing the various weighing devices then on the market, I called a meeting of representatives of every manufacturer of commercial weighing and measuring devices in the United States—that meting being held in one of the large committee rooms in the Capitol Building at Albany.

"I continued as Superintendent of Weights and Measures for the State of New York until March 1914, when I resigned and formed a company with a Mr. Boyle, to design and develop scientific measuring instruments, in which association I continued until June, 1915. I then became the head of the Service Department of the Fairbanks Company at New York. The Fairbanks Company manufactures scales and weighing devices.

1145 "In addition to the work I have mentioned, in connection with scales, I have attended every conference of Weights and Measures Officials at Washington, D. C., having been a delegate to every conference, except one. These meetings are called, 'The National Conference of Weights and Measures,' and is an organization primarily of State Weights and Measures Officials, or delegates appointed by the governors of the various states to confer in relation to Weights and Measures matters.

"During the course of this experience I have become familiar with the various kinds of automatic weighing and computing scales on the market.

"I know the essential elements of the type of scale commonly known as the platform, automatic computing and weighing scale."

(The following testimony was taken subject to objection by counsel for complainant.)

The various elements I would consider essential are as follows:

1. The counter force system;

2. The supporting base with the levers which it supports;
3. The dash-pot;
4. The shock absorbing means;
5. The openings in the housing, particularly on the customer's side, so the customer can read the indications;
6. The indicating mechanism;
7. The mounting of the indicating mechanism;
8. An enclosing housing;
9. Levelling devices, or levels on the scale base.

"By my first element—the counter force system—I mean the mechanism or force which acts counter to the load on the platform, and which must respond properly to whatever load is placed on the platform. In the scale before me—Defendant's Exhibit 55, and Complainant's Exhibit Defendant's Scale—the counter force system is the pendulum. The essentials of a counter force system are that it shall respond accurately and properly and immediately under all working conditions, and be not subject to changes which might occur, due to climatic conditions, and also not affected by changes due to him, such as permanent set or change in the element itself.

"By my second element—supporting base and levers—I included the whole of the base on which the scale rests on the counter,
1146 and the levers thereon which support the platform, and also include the pivots and bearings of such levers. It is highly important, of course, that these bearings and pivots be properly set and that the lever be prevented from shifting on the platform, and the platform be properly stabilized on the lever. This includes the levers up to the counter force system—the system of levers on which the platform is supported, and which, as that platform moves, transits the force to the counter force system.

"Q. In the third element which you call dash-pot is there any synonym or other thing you could use instead of the dash-pot?

"A. Yes, the dash-pot has two effects, it is very often called a damping device.

"Q. What is the object of such a device?

"A. The object of a dash-pot is primarily to dampen the vibrations which will occur elsewhere in the whole mechanism of the scale when a load is suddenly placed on it or suddenly taken off the platform. The whole scale mechanism being in such a state of equilibrium and being a vibrating system, naturally when you take the load off or put it on considerable vibration ensues, and in order to repair them, those vibrations have to dampened out.

"Q. The primary object then of that device is to obtain quick facility?

"A. Yes, sir.

"Q. The next element is that of shock absorber. Tell the court what you mean by shock absorber as an element.

"A. On any delicate mechanism to which a load or force is applied or when it is suddenly applied it shocks the whole system and particularly when you have a motion translation device such as a rack and pinion. The shock is first imparted to the first teeth of the rack or the pinion and it is highly essential that those racks and

pinions be very smooth and very accurately made, so that unless you have some means of taking that shock away from particularly the first few teeth, they soon become injured which will result in incorrect indication.

"Q. Now, in the device before you known as Defendant's Exhibit 55 where is the shock absorber, the element which you have named, if at all?

"A. There are really two. The real shock absorber is on the top and attached to the bottom of the rock in the form of a flat disc or spring, and also an element of the shock absorber is the
1147 dash-pot, in other words, the dash-pot not only acts in the damping of the vibration but also assists in relieving the shock to this mechanism. The spring in this particular type, which is a flat spring, takes the first shock off of the rack as the rack moves up or down as the case may be.

"Q. Your next element was the openings in the housing, particularly on the customer's side. What do you mean by that?

"A. It is very essential, and I speak from an economic standpoint now, that the customer as well as the dealer be able to read the indications and read them properly. My experience was when I was in Albany that that was one of the difficulties that the customer had. In some of the scales they saw an opening on the customer's side but no fiducial mark or indicating mark that they could read or which they could accurately extend to tell what the weight was so as to check up what purchases they made or check up what the dealer was giving them.

"Q. You are now speaking of a practical scale?

"A. I am now speaking of a practical scale.

"Q. The object of that opening was to enable the customer to check the dealer's computation, was that the idea?

"A. Yes. Of course, from a theoretical standpoint if you didn't deal with a customer, you would not need any customer's window.

"Q. Your next element is the indicating mechanism. What do you mean by that?

"A. To your counter force system, either directly or indirectly, must be added some kind of a mechanism which will indicate what the weight is which has been placed on the platform. Now, that indicating mechanism may take various forms, it may be a pointer moving over a part of an arc or a part of a surface, it may be a pointer revolving completely through 180 degrees or even through more than 180 degrees, or it may be a disc revolving, or it may be a cone revolving or any number of forms, but it must be some indicating device to indicate what has been placed on the platform, and I include in that also, not only the indicating mechanism, but there must be included the markings thereon and also the reference or fiducial marks which you read: it is purely a question of relative motion between the two, one may be the moving part or the other.

"Q. In other words, in every indicating device one of the elements must be stationary and the other move?

1148 "A. Yes.

"Q. And it is immaterial whether one moves or the other?

"A. Immaterial.

"Q. In the particular device before you that indicating mechanism so far as the figures are placed thereon is in the form of a cylinder?

"A. Yes, sir.

"Q. In your answer you said it may take any of the forms you have described?

"A. Yes, that means an infinite variety.

"Q. Any one of an infinite variety?

"A. Yes.

"Q. Your next element was No. 7; mountings or support for the indicating mechanism. Why do you differentiate and make a separate element of those, Doctor?

"A. Because in any kind of an indicating weighing device where you are establishing a state of balance at the point of indication you have a state of balance and zero force, consequently you must have as nearly as possible zero friction and consequently the moving of that indicating device is exceedingly important and probably the great majority of errors, in my experience, of indicating scales is in the fact, the majority of them I believe are in the fact that they have not a sufficiently frictionless mounting for the indicating mechanism.

"Q. In the device before you, Defendant's Exhibit 55, what form of mounting is used on which the indicating device is superimposed?

"A. The axis or spindle of the cylinder rolls on two circular wheels forming roller bearings of considerable radius of the roller.

"Q. Look at Complainant's Exhibit of Defendant's Scale, if you please, and state what is the character of the element No. 7, the mounting or supporting for the indicating mechanism in that exhibit?

"A. Substantially the same thing.

"Q. The next element which you have mentioned is that of an enclosed housing.

"A. That should be enclosing housing.

"Q. Why do you name that as one of the elements in a scale of this character?

"A. It is very important that in a delicate indicating instrument which is exposed to accidental introduction of foreign material or by purposely tampering by outsiders that all the moving
1149 parts as far as possible be enclosed, particularly the indicating mechanism and the counter force system.

"Q. Will you look at Complainant's Exhibit of Defendant's Scale and Defendant's Exhibit 55 and state whether they have that enclosing housing?

"A. This Exhibit 55 has such an enclosed housing of the counter force system and the indicating mechanism, the other exhibit has not any enclosed housing of the indicating mechanism due to the removal of one end and has not a completely enclosed housing of the counter force system as it stands here.

"Q. Will you look at the other end of Complainant's Exhibit of Defendant's Scale and state if that end is enclosed.

"A. The other end is enclosed.

"Q. Will you examine the periphery which differs at that end and state if there is anything to indicate there is an enclosing for that?

"A. There is certainly an enclosing end for this and there is also a provision made for an enclosure on the bottom of the case, but they are not present in the exhibit.

"Q. They are removed as you see them?

"A. They are removed.

"Q. Are you familiar with the scales known as the Toledo platform automatic computing scales?

"A. Yes, sir.

"Q. When did your knowledge of such scales begin?

"A. It began about 1904.

"Q. Where were you then, Doctor?

"A. I was with W. & L. E. Gurley in Troy, New York, but I had been examining scales in Massachusetts when Mr. Palmer was Commissioner of Weights and Measures and also in Rhode Island when Captain Pettus was State Sealer of Weights and Measures of the State of Rhode Island.

"Q. Were all the scales of the Toledo Company of the so-called cylinder type which you examined platfrom scales?

"A. Yes, I never saw any other kind.

"Q. As State Supterintendent and as a member of the Specifications and Tolerance Committee and those other offices or positions which you have held have you many times seen cylinder scales?

"A. Yes, sir.

"Q. And assisted in making regulations for their inspection together with other scales?

"A. Yes, sir.

1150 "Q. The last element which you have named is a leveling device. Do you know on what platform cylinder scale such a device was first incorporated?

"Mr. Zane: We object.

"The Master: The question is as far as he knows.

"Mr. Meads: Yes.

"The Master: Objection overruled.

"Mr. Zane: Exception.

"A. From my knowledge the first ones that I ever saw with levels on the platform were Toledo platform scales.

"Q. Why did you enumerate No. 9 as one of the elements in such a scale?

"A. Pardon me, what is No. 9?

"Q. Leveling devices.

"A. Because no platform scale will work to its best advantage unless it is level and with a mechanism which has an indicating device connected directly or indirectly to a counter force system which indicating device must operate, as freely as possible; it is highly important that all the parts be as level as near as they can be made so.

"Q. In the Defendant's Exhibit 55 where is that level situated?

"A. On the base, (indicating) two cross levels right on the base immediately in front of the housing enclosing the counter force system.

"Q. Look at Complainant's Exhibit of Defendant's Scale and state where the level upon that scale is.

"A. There is a level on this scale, one level at right angles, or rather, parallel to the axis around which the pendulum moves and at right angles to the front face of the housing. Is that the last?

"Q. The last was leveling devices, No. 9. If you wish to add something, you may do so.

"A. I would like to add to that as an important element on that scale, though not of a mechanical nature, which from my experience as State Superintendent of Weights and Measures had a great deal of influence to the merchants——

"Mr. Zane: We object and move to strike out what had influence with the merchants.

"The Master: Objection sustained.

"Mr. Meads: Maybe he can tell.

"Mr. Zane: No, he cannot, he ought to know it.

"A. (continued). One important element that contributed to indicating value scales and which I had to deal with when Su-
1151 perintendent of Weights and Measures was the correct graduation of the chart. There had been a number of charts which were on the market which were not arithmetically correct.

"Mr. Zane: We object to that if your Honor please. This is the contest between the one type of arranging figures on a chart and the other. They have nothing to do with the scales.

Mr. Meads: We were the first to adopt it and the testimony shows it.

"Mr. Zane: They were not the first to adopt it and the testimony does not show it.

"The Master: Regardless of that, it is one of the elements that the defendant claims adds value to its scale and helps to sell it.

(Answer read.)

"Mr. Zane: We move to strike out his statement that there were a number of charts not arithmetically correct as stating a conclusion.

"The Master: I will let the answer stand.

"Mr. Meads:

Q. Now, doctor——

"Mr. Zane: Is he to be permitted to testify to all kinds of conclusions?

"The Master: No.

"The Witness: May I state what I did officially in relation to such charts?

"The Master: No, I don't think that's material.

"Mr. Meads: Except to show his knowledge.

"Mr. Zane: I don't think it shows his knowledge, it might show his prejudice.

"The Master: You may describe the different kinds of charts.

"Mr. Meads:

"Q. Just describe the difference of those charts as they existed.

"The Master: The different kinds of charts you are familiar with.

"Mr. Zane: Without any comment upon their correctness or incorrectness, that's what we object to.

"The Master: At present the first thing is a description of the charts.

"A. Charts were in use in 1906 and 1907 of two broad kinds, the value indications in one—May I state what over again so as to have that as brief as possible.

1152 "The Master: Strike that out and commence your answer over.

"Mr. Zane: I would rather not.

"The Master: Let it stand then.

"A. There were broadly two types of charts, one which was divided in each row or column arithmetically correct, namely, for every weight a correct indication.

"Mr. Zane: We object to 'arithmetically correct,' he can describe what the figures were.

"Mr. Meads: 'Arithmetically correct' is a distinction.

"A. (continued). On one of which there was for every weight only one value shown when that particular weight was on the platform for every value price per pound, the other kind of charts were those that when a number of certain weights were placed upon the platform instead of only showing one value at a price per pound there were two or three values which might appear at a certain definite value price per pound. In short, in the first there was no duplication of money values, in the second class there was a duplication of money values in the chart at given price per pound.

"Q. Were you familiar with the Toledo scales in 1906?

"A. Yes.

"Q. What chart, if you know, was incorporated into the Toledo scale?

"A. The chart that had for each weight placed upon the platform only one value indication, there was no duplication of values in a column for a given price per pound.

"Q. Were you familiar with what was known as the Smith or Boston Scale?

"A. Yes, sir.

"Q. What was the chart used on that scale?

Mr. Zane: Same objection here.

"The Master: Objection overruled.

"A. That when you had a certain weight on the platform in certain weight values there would be a duplication of money values in a column under a certain price per pound.

"Q. The effect of which was to what?

"A. The effect of which was that with a weight on the platform the dealer might read or any person reading the scale might take a choice of two or three values that the computation should be, and that is what I meant by arithmetically correct. It is not a question of simple multiplication.

1153 "Q. Doctor, these ten elements which you have mentioned, nine mechanical and one other——

"A. There is one element coupled up directly with that last one which to my mind was very important.

"Q. Just a minute. I think I can lead to that if you please. You have given here ten elements. In your opinions are these all of equal value?

"A. No.

"Q. Adverting to the first, your counter force system, in the Toledo scales which you have seen what was the counter force system?

"A. A pendulum.

Q. Now, in your statement that these elements were not of equal value what value do you ascribe to that counter force system?

Mr. Zane: We object. This is in the wildest realm of conjecture.

Mr. Meads: I guess perhaps we had better refer you to the case which we will follow literally if we can, the 216th Federal. I think your Honor is probably familiar with the case of Herman vs. Youngstown Car Manufacturing Company, but I will read what the Appellate Court has said on that subject.

(Mr. Meads here read from above case, 216 Federal, p. 604, reading the opinion which appears on p. 607, and then followed a long discussion between counsel and the Master.)

Mr. Meads:

Q. Doctor Reichmann, in the machine before you known as Complainant's Exhibit of Defendant's Scale and in the machine, Defendant's Exhibit 55, if this particular form of indicating device known as a drum was removed, what would be the effect on the machine?

A. As a machine why it would still have all the essential parts of a scale with the exception of an indicating device.

Q. Now, if that particular indicating device was removed, would it be possible on the machine in question to substitute any other indicating device?

Mr. Zane: We object.

The Master: I don't think this witness yet has been qualified to testify on that subject. I don't think his experience so far as it has been stated qualifies him as an expert to answer the questions

1154 you suggested you are going to put to him. If he is qualified to answer, I will take that testimony, but I would like to know about his qualifications.

Mr. Meads:

Q. Doctor, what have you actually done in the manufacturing line?

A. Well, when I was in Chicago here with Gatner & Company of South Lake Street I was actually working in the shop making instruments, and with W. & L. E. Gurley I was superintendent of their shop.

The Master: What were they making, scales?

A. Weighing devices, yes, sir, weighing devices—not computing scales—balances and weights and refined scales and scientific instruments and physical apparatus of various types.

Mr. Zane: Refined scales.

The Master: What do you mean by refined scales?

A. Scales for testing purposes.

The Master: But they were not the ordinary commercial scale that would be used in a meat market?

A. Oh, no, you don't use that except the springs were used and a lot of the physical apparatus was as crude as those used in a meat market of course. That was actually manufacturing, and also in the four years I was there I was going out and selling physical apparatus and weighing devices, among the weighing devices sold being a number of ordinary portable commercial scales. During the time of my office in Albany it necessarily became a part of my work, in order to formulate equitable tolerances or specifications as to the working parts of the scales, to not only examine into the way they were made but to examine as to their particular function, that is, the function that each one played in a scale as a whole, so as to apportion proper weights and values to particular specifications, which were important in a weighing device. That took in of course every class of scale from the highest type of analytical, chemical balancing to a railroad track scale.

Mr. Meads:

Q. Did it include these counter scales?

A. Counter scale and computing scales.

Q. Since you have been engaged with Fairbanks what has been your occupation?

A. Our service department which I started with them is an advisory department, advising corporations as to the proper kind of weighing and measuring commercial scales to get, in super-
1155 intending such repairs and adjustments as can be made in scales, and also incidentally selling scales to other people, including the computing scales, however not of a drum computing type because they do not make a drum computing type.

Mr. Meads: Now, I think he has had a wealth of experience that very few people have.

Mr. Zane: Let me ask him a question or two.

Cross-examination.

By Mr. Zane:

Q. You say with Fairbanks you sold computing scales, what kind?
A. The Fairbanks Stimpson computing scale.
Q. What kind of a scale is that?
A. That's a fan-shaped pendulum scale; as I stated, not a drum.
Q. How much of your time did you spend out in the trade selling scales?
A. Selling scales?
Q. Yes.
A. In the last two years do you mean with the Fairbanks Company?
Q. Well, the time you have been with Fairbanks.
A. Oh, with Fairbanks I should say fifteen or twenty per cent.
Q. Where did you travel?
A. Just around New York City and New Jersey.
Q. Continuously from day to day?
A. Oh, no, not continuously from day to day.
Q. Acting as a regular salesman?
A. Substantially as a regular salesman.
Q. What do you mean by substantially?
A. They don't have any commission basis there you know, everybody is on a salary, they have no men on commission at all and everybody is supposed to help sell, take in an order from the people, telling men what they needed and taking the order from the customer.
Q. So you had no experience at all in going out and going from customer to customer, prospective customers, trying to sell scales, that was not your experience at all, was it, with Fairbanks?
A. With the Fairbanks for fifteen or twenty per cent of the time, yes.
1156 Q. Traveling from customer to customer?
A. No, not continuously.
Q. Day after day?
A. No, not day after day.
Q. How did you happen to go out and see a particular customer?
A. Suppose I had a client in the service department at Perth Amboy that had some difficulty in some weighing material and I went down there. Instead of coming way back with a half a day left, I would go to see some people there and talk to them about scales.
Q. How would you find the customer?
A. Simply look at the city directory and the industrial directory in New Jersey for instance.
Q. Look in an industrial directory and go and interview that man and see if he didn't want to buy a scale?
A. Yes.
Q. That was your experience?
A. Yes, sir.

Q. And fifteen or twenty per cent of your time with Fairbanks was put in in that way?
A. Not more than that.
Q. And that was when you went out on some service matter?
A. Yes.
Q. And you had a little time on your hand and you would go and try to sell something?
A. Yes.
Q. That's it?
A. Yes.

Mr. Zane: I submit they have not helped this situation a bit.

Q. Since you have been with Fairbanks you have not been in the manufacturing business?
A. No, not with Fairbanks.
Q. When you were with Gurley they were manufacturing all kinds of scales you say?
A. No, not all kinds of scales.
Q. What kinds of scales were they manufacturing?
A. They were manufacturing testing scales, balances.
Q. What do you mean by test scales?
A. Scales for the purpose of testing commodities and also for the purpose of testing weights, commercial weights.
1157 Q. What do you mean by testing commodities?
A. An inspector goes around and buys a pound or two pounds of some commodity. He wants to find out whether the right weight has been given, puts it on his scale and tests it.
Q. You were making scales that you sold particularly to sealers?
A. That were sold particularly to sealers, yes, sir.
Q. Were you engaged in making scales that were sold generally on the market?
A. Idon't understand that question.
Q. You say you made some testing scales which you sold to sealers.
A. You mean generally on the market to retail dealers?
Q. Yes.
A. No, no.
Q. Now, what did you have to do with the manufacture at Gurley's?
A. Superintending the shop.
Q. What kind of a shop?
A. Where they made the physical apparatus of the testing instruments.
Q. What physical apparatus?
A. Physical apparatus in the line of mechanical apparatus for schools and industrial plants and some heat apparatus and some sound apparatus.
Q. Those were scientific instruments?
A. Those were scientific instruments.
Q. Now, you said you made testing scales, balances you said you made. What were the balances used for?

A. Balances are used for the purpose of testing weights or testing chemicals.
Q. They were testing balances?
A. Yes, sir.
Q. What do you mean by testing chemicals?
A. A chemist uses a balance all the time making analyses.
Q. You mean those fine even balanced scales?
A. Yes, even balanced scales.
Q. Those were the kind of scales?
A. Yes, sir.
Q. What experience did you have in selling those things?
1158 A. I sold all the stuff that was sold there in that department.
Q. Did you go out traveling?
A. Yes.
Q. Selling?
A. Yes.
Q. Selling these fine test balances?
A. Yes.
Q. Selling scales to sealers and what else?
A. And visiting some of the colleges.
Q. Scales for colleges?
A. Professors of physics in those colleges.

Mr. Zane: It is apparent his experience never extended in this line at all.

The Master: What was the nature of your experience while you were connected with the State Sealer's office in New York, what did you have to do there?

A. I was the head of the department and it was an office to supervise the work and elevate the work and instruct the weights and measures officials in the various counties and cities to do the testing of apparatus that is submitted to the sealers to test commercial apparatus in stores and industrial plants, and to see that the law in relation to the weighing and measuring devices is enforced.

Mr. Meads: In this testing did you ever take apart one of these scales and examine the interior of these scales.

A. There was not a scale I passed on on the matter of establishing specifications that the scale was not completely taken apart.

Mr. Meads: And then assembled?

A. And then assembled every type of them, there must have been in the neighborhood of two hundred of them.

The Master: What do you propose to prove by this witness?

Mr. Meads: Just what I started to prove and which you said you would allow if he was qualified as an expert, that from his knowledge of mechanics and from his actual experience in these scales that removing this drum entirely what he could add to the actuating mechanism.

The Master: I think he is competent to testify on the point
1159 as to what substitutions might be made for the parts found in the machine in question.

"Direct examination (continued).

Mr. Meads:

"Q. Now, No. 6 as given by you, Doctor, was an indicating mechanish. In the particular device before you the mechanism consists of a drum, does it not?

"A. Yes, sir.

"Q. If that drum was removed, what other form of indicating mechanism could you use?

"The Master: I will take the testimony subject to the objection.

"A. Well, if that particular drum were removed, of course evidently you could substitute another drum, put a drum of a different weight or a different construction on, or you could substitute as another indicating device any shaped frustrum of a cone.

"Q. As a matter of fact, are there any computing scales with frustrums of cones as indicating devices?

"A. Yes, sir.

"The Master: You would have to build another frame?

"A. Unless you took this drum out and substituted another drum, why then you would have to take this part off here of course.

"Mr. Zane: What's this?

"A. This part of the housing would have to come off (indicating), or in case you wanted to substitute a cone, you could put a cone in the same housing, but you would have to change the mounting slightly because you would want to put it eccentrically in relation to the indicator.

"Mr. Meads:

"Q. You would use the cone instead of a cylinder?

"A. Yes.

"Q. Now, in addition to the different kind of drum and the cone, is there any other device?

"A. By taking the upper part of the housing that contains that particular indicating mechanism you can, of course, put a different shaped housing and have the counter force system connected directly or indirectly to a revolving disc which would either revolve one part of 360 degrees or through a complete 360 degrees or through only 180 degrees. It could be divided necessarily into values so that the
opening would be only on one side or on both sides of the
1160 center so that if it revolved only 180 degrees, you would have a considerable range with a comparatively small disc. As another indicating device you could have a revolving pointer.

"Q. In front of a dial?
"A. In front of a dial, that dial being graduated in weight values and also in money values.
"Q. Were all the forms that you mentioned both computing and weighing devices?
"A. Yes, computing and weighing. As I understood you, you wanted computing and weighing.
"Q. Yes, I want computing and weighing. Have you seen in actual use scales such as you have described?
"A. Why, yes, a revolving disc is a familiar illustration of a hanging computing scale as made by Shattelan and Forschner. Shattelan and Forschner have made those for years.
"Q. Doctor, have these revolving disc scales which you have mentioned been used any length of time to your knowledge?

"Mr. Zane: Is that a computing scale?

"A. A revolving disc scale, to my knowledge they were in use in 1904; I don't know how long before that.

"Mr. Zane: You don't claim that as a computing scale, do you?

"A. As a computing scale.

"Mr. Meads:

"Q. You mentioned a cone form of scale. Do you know whether they have been in use for any length of time?

"Mr. Zane: Of course, this is all under our objection. Don't want to renew my objection each time.
"The Master: Yes.

"A. Yes, they have been in use, cone shaped scales I remember first seeing in 1906 about, they were Angldile scales.

"Mr. Meads:

"Q. Was that a computing as well as a weighing scale?
"A. That was a computing as well as a weighing scale.
"Q. The figures were not arranged on a cylinder but on a cone?
"A. They were on a cone which had the advantage——
"Q. Yes. Will you tell the court what advantage, if any, there is of a cone over a cylinder?
"A. In a cylinder naturally as you progress with the money values, the increasing money values per unit weight, you
1161 have to make smaller and smaller divisions. Now, with the cone the cone can be spread out so as to take care of it so as to have particular space divisions per unit money value, say for one cent or two cents, which would be impossible on a cylinder.
"Q. The lower price would be at the smaller end?
"A. Yes.
"Q. And the higher on the large end?
"A. Yes, on the large end so you could have equal lineal spaces on

the periphery of the cone per unit value, per money value. That advantage of course also exists in a flat disc.

"Q. Just explain to the court why that exists in the disc scale that you described.

"A. Because in the disc scale your radial values increase and your outside circumference necessarily is a great deal larger than the inside so the lower priced value could be on the inside and the higher priced on the outside and you have in effect the same proposition you have in a cone. Of course, a disc is practically nothing but a cone flattening out or a cone is a disc pulled together generally speaking.

"Q. Dr. Reichmann, at the adjournment last evening you had mentioned three substitute indicating devices which could be used with the mechanism in Plaintiff's Exhibit of Defendant's Scale and in the exhibit known as Defendant's Exhibit 55.

"Mr. Zane: We move to strike out the statement. It is not a question and we object to the statement because it does not correctly represent the evidence, but whether it does or not it does not belong in the record, statements by counsel.

"Mr. Meads: I had not finished my question.

"The Master: Finish your question.

"Mr. Meads:

"Q. (continued). The first of these substitutes which you mentioned being a dial. Will you please tell the court how such a dial could be affixed to this exhibit. (Indicating Exhibit 55.)

"A. A revolving dial could be affixed.

"Mr. Zane: We have an objection to all this testimony, have we not?

"The Master: That's understood. There is a general objection to this whole line of testimony.

"Mr. Zane: Did your Honor rule on that objection I made to the statement?

1162 "The Master: No, I directed counsel to complete his question.

"Mr. Zane: Well, we object to the statement contained in the question seeking to represent the evidence.

"The Master: It is a recital and seems to me to be a fair recital of what the witness said for the purpose of putting another question. I will overrule the objection.

"Mr. Meads:

"Q. Have you the question in mind after all this interruption? A. No.

(Question read.)

"A. By taking the upper part of this housing off it would be a simple matter to put another housing over here which has a revolving dial with price computations or weight computations on either or both the faces of the dial; to the axis of the circular dial disc

would be attached a pinion which would move on roller bearings or any substantially frictionless bearings and that could be directly attached to the lever with a rack.

"Q. There is a rack in the device in question, is there not, Exhibit 55?

"A. Yes, sir.

"Q. The rack which you have described as connecting with the pinion of the dial indicator would stand how, vertical or horizontal?

"A. It would stand horizontal, or I mean at an angle, not right from this lever here up to the pinion.

"Q. Mechanically is there any objection to the rack mounted in the angular position instead of a vertical?

"A. There is no difference mechanically whether it is mounted horizontally or at an angle. Vertically is simply one of the positions it might occupy. In any instance it would have to be balanced of course.

"Q. In the substitution of that form of indicating device which you have designated as a cone in the devices before you, Complainant's Exhibit of Defendant's Scale and Defendant's Exhibit 55, how could such an insertion be made?

"A. That would be simple because you could use the same housing exactly, and instead of having your axis horizontal and parallel to the face of the scale here, you would move the axis of the cone, shift one of these bearings to an angle slightly out of the horizontal, it would depend upon what the angle of the cone was, say three-eighths of an inch.

1163 "Q. Shift the angle?

"Mr. Zane: We object.

"The Master: Finish your answer.

"A. Simply move one of the supporting bearings so as to shift the axis parallel to the edge of the cone so the edge of the cone is parallel to one of the faces. Then on the axis of the cone would be a pinion which would engage with the rack in a similar manner, substantially the same as shown here.

"Mr. Meads:

"Q. Could the same bearings that are in the device in question, the roller bearing, be used?

"A. Yes, in the same housing.

"Q. And in the same housing?

"A. Yes.

"Q. How long, Doctor, to your knowledge has the cone form of indicating device in computing scales been used on the market?

"A. The cone computing chart was on the market certainly in 1906 or 1907, but——

"Q. Has it been continuously since?

"A. Yes.

"Mr. Zane: What was the name of the scale?

"Mr. Meads: I object to cross examination until I am through with the direct and move to strike out the question.

"The Master: It may be stricken.

"Mr. Meads:

"Q. In the construction which you have called the dial construction, either by the dial itself moving or the indicator moving across the face of the fixed dial, how long has that construction been on the market in computing scales?

"A. Well, to my knowledge certainly before 1903.

"Q. And continuously since?

"A. Continuously since, yes, regular catalog article, however not in combination with a platform.

"Q. There is no mechanical difficulty in making a combination with a platform?

"A. No, not at all.

"Q. You have described the connection?

"A. Yes.

"Q. Do you know what is known as the Richmond scale?

"Mr. Zane: What?

"Mr. Meads: The Richmond scale.

"A. The Richmond scale?

1164 "Q. Yes.

"A. I don't know it by that name.

"Q. Do you know it by that name?

"A. No."

Q. Doctor, from your experience in the manufacturing and testing, from your experience as inspector of weights and measures, from your experience in disassembling and reassembling various computing scales and weighing devices and from your experience in the scales of various weighing devices, have you an opinion as to what relation the parts which you have enumerated bear to each other?

A. Yes.

Q. Will you give to the court the benefit of your opinion?

Mr. Zane: We object, first on the ground that the witness is not competent to speak on such a point, secondly that no foundation has been laid for such evidence even if it is admissible, and thirdly that this evidence cannot be used in this connection for the purpose of separating one whole machine where if you regard the patent of the complainant as a patent for the revolving drum, the indicator drum and any weighing mechanism, or for the indicating drum, the patent fails for a machine and this machine, the whole of it, is an infringement upon that patent.

The Master: I will take the testimony subject to the objection. You may answer the question.

Mr. Meads:

Q. Give the court the benefit of your opinion.

Mr. Zane: We make an objection that the question itself is not understandable, relation in what respect, you can't tell. Is it the

mechanical relation or some other relation? It is impossible to tell what that question means.

Mr. Meads: I have used the words of the decision if your Honor please, and if the witness does not understand it——

A. I understand.

The Master: I will hear the answer. I am not entirely clear. You may answer and I will pass on the answer.

A. Well, if you consider a scale, necessarily it would have to be considered from two standpoints, first as a mechanical
1165 machine to bring about certain definite results, and second from the economic side as to its utility or serviceableness by the user and also to the consumer. From the mechanical and instrumental side, considering a drum computing scale as a whole or as one hundred percent, it seems to me that the important element of such a machine is first and foremost the counter force system, namely, that which automatically counterbalances the load on the platform and that its proper function is the most important consideration.

Mr. Meads:

Q. Pardon an interruption. You say the most important in relation to the other parts. What do you mean?

Mr. Zane: He didn't say in relation to the other parts.

A. I said the most important part of the scale. Considering the scale as a whole as one hundred per cent, I should consider the counter force system used as certainly anywhere from fifty to seventy-five per cent because the whole accuracy of the scale and reliability of the scale depends upon the proper functioning of that counter force system.

Mr. Zane: Now, your Honor please, we move to strike out that statement as not belonging to the sphere of even expert evidence at all.

The Master: I will let the answer stand.

"A. (Continuing:) I was speaking that in an automatic indicating scale, whether it is a single, indicating scale or a computing scale, the proper functioning of the counter force system in my opinion is the most important element, as I say, constituting fifty or sixty per cent.

"Mr. Zane: Go ahead.

"A. The accuracy of construction of a lever system of any indicating scale, the proper stabilizing of the platform, proper provisions for shaft and convenience in use and aiding stability are to my mind the second important function. To explain, in distinction a counter scale is more stable and more easily used than for instance a hanging indicating scale.

"Mr. Meads:

"Q. Why, what is the distinction of a hanging scale as against a counter scale?

"The Master: Why not let the witness finish this one answer?
"Mr. Meads: Very well.

1166 "A. (continued). The third most important element——

"Mr. Meads:

"Q. Do you apportion any particular relation?
"A. Why, yes, I should say that certainly would constitute anywhere from one-quarter to one-third of the value of the instrument as a whole, taking my values as a whole.
"Q. Do you mean twenty-five per cent?
"A. Twenty-five per cent. The next important thing on a scale is the proper connection either directly or indirectly between the counter force system and whatever indicating mechanism may be used. That is not nearly so important and I should say it would be two to five per cent. The next important item of any indicating scale is a dash-pot to check the oscillations and dampen the system so that an indicating scale can be read, without which it would be necessarily inconvenient to read it, and from an economic standpoint it would probably not be serviceable almost as a scale. That certainly is worth five to ten per cent, or take a minimum value say of five per cent.
"The next important point on an indicating scale to my mind is to have a proper shock absorber so as to protect the motion translation device, namely, as ordinarily used, a rack and a pinion, so as to prevent the marring of it or the injury of it from the sudden loads that are put on the platform. That, inasmuch as the dash-pot takes up part of that shock, probably would not be worth more than two to five per cent, say a minimum of two per cent.
"The next important point to my mind is the mounting of the indicating device. Any indicating scale being an equilibriated system, at the point of equilibrium there being zero force and at which place you want the more accurate indication or registration, it is necessary to have the mountings to be as near frictionless as possible and that is the important consideration of mounting; I should say that would be worth certainly five to ten per cent, take a minimum of five per cent.
"A platform scale, if in fact such a scale is a platform scale, an important feature are the levels on the platform so the machine at any time can be seen to be level because in fact unless it is level the scale will not function properly for any length of time, it may temporarily until certain wear comes, but it must be level in
1167 order to function properly. That certainly is worth from five to ten per cent, or roughly, a minimum of probably five per cent.
"Now, we have come to everything except the indicator, the in-

dicating device itself which I would— Well, I will take that up in two or three parts because it properly can be divided in two or three parts. The indicator itself, the particular form of it from a mechanical standpoint is not so important as most of those other factors, I should say roughly it would be worth from two to five per cent, a minimum of two per cent. The indications on the indicator and the proper divisions on the indicator, or in fact if it were a revolving hand, proper divisions on a stationary chart, or if it were a revolving chart the proper indications of a revolving or rotating chart is worth from two to five per cent, really it is worth—yes, we will make it two to five per cent because if they are not correctly divided, of course you get improper indications, incorrect indications.

"Q. That is the arrangement on the indicator?

"A. The arrangement of figures on whatever the indicating device is.

"Q. As distinguished from the indicator itself?

"A. As distinguished from the indicator itself.

"Mr. Zane: How much?

"A. Two to five per cent, a minimum of two per cent.

"In my rough estimate I may go a little above one hundred per cent, but I am trying to get it down to a minimum value. The next and important part of any indicating scale is the facility with which it can be read by the observer and that means in the case of an ordinary counter scale not only the dealer but also the customer, and the proper opening and correctly placed reference or fiducial mark on both sides is an important consideration which in fact in a lot of scales was formerly not present, and that is worth two to five per cent.

"Mr. Meads:

"Q. With this minimum of two to five per cent, having exhausted one hundred, are there any other elements you want to enumerate?

"Mr. Zane: We object to his telling him he has exhausted his one hundred per cent.

"The Master: Objection sustained.

"Mr. Zane: What is your minimum?

"A. The last one?

"Mr. Zane: Yes.

"A. Two to five per cent.

1168 "Mr. Zane: Which is it?

"A. A minimum of two per cent. I have tried in each instance to indicate the minimum. If I did not, it is the lowest.

"The Master: Your lowest figure in each case?

"A. I have tried to make it a minimum. That lowest figure may vary by one or two points because these are all rough estimates because necessarily, as I stated before, one factor may be of more importance in one particular case than another. For instance, in

one case a man may have a counter so that he cannot put anything on the counter and he must of necessity use a hanging scale, so in that case a counter scale would not enter into his consideration whatsoever.

"Now, from an economic standpoint there may be, and that's judging from my experience as State Superintendent of Weights and Measures and seeing thousands of scales in use and testing them and having them tested under my supervision and seeing hundreds of them sold, perhaps other features that enter such as——

"Mr. Meads:

"Q. Have you any in mind?

"Mr. Zane: He started an answer.

"A. Yes, sir, such as for instance in some scales there is the feature of electric illumination of the chart to facilitate reading, others having signs for either the tradesman to insert signs or have signs on the scale of a particular kind, for instance "no springs."

"Mr. Meads:

"Q. In the Exhibit 55 does it have any such signs as you now refer to?

"A. I would have to look. Do you want me to look at it?

"Q. See if that contains what you are now talking about, Doctor.

"A. (Witness examines Exhibit 55.) That has one sign on it that I believe influences or did influence some people in the State of New York and that is during an agitation——

"Mr. Zane: We move to strike out what influenced people in the State of New York.

"The Master: Yes, motion sustained. You are not asked that question. Go ahead.

"Mr. Meads:

"Q. The signs which you refer to, without saying what they have done in the State of New York, in the exhibit in question appear there, Doctor?

"A. Appear on the customer's side. The economic side
1169 of it, the customer is influenced by the signs appearing on the scale and particularly if such signs take advantage of some popular prejudice that may exist, it has economic value.

"Mr. Zane: I submit to this dividing profit on the scale? I never heard of anything so utterly silly in my life as this proposition. This is not a customer for a scale, this is the customer buying over the scale.

"The Master: No. You may give its relative value as compared with the other parts of the machine if it has any.

"A. From the purely mechanical side of it?

"The Master: Yes.

"A. Well, I have substantially finished on the merchant's side of it when I enumerated those percentages, and what I was attempting to do was to take the relative values of these from the standpoint of the customer as I saw them in my experience in dealing with the customers for over seven years in the State of New York during the agitation when the agitation existed for having correct weighing and measuring instruments.

"The Master: I supposed you were naming signs as one of the elements that gave some value as compared with the machine as an entirely like the other elements that you did mention and for which you named percentages.

"A. No, I was going to divide this up into a separate division and just mention these other factors.

"The Master: And give the value of each factor?

"A. No, that would be an exceedingly difficult proposition for me to do.

"The Master: As I understand, you expect to go ahead and give the percentage value as you did the other parts of the machine; I understand you are separating it into parts and I suppose you are going to separate it into parts and give the relative value of each part when separated.

"A. Yes, that is what I had in mind to do. The housing of the scale is of considerable economic importance.

"Mr. Zane: He has not given the value of these signs yet.

"Mr. Meads: He is coming to that. The signs are part of the housing.

"The Witness: How do you wish me to proceed? Do you want me to give them in each instance just as I mention it?

1170 "The Master: Yes, I think you had better do it that way. You want to divide the housing up into different parts?

"A. Yes.

"The Master: Well, in doing that give the value of the different parts as they come along.

"A. You see what I am trying to do, and I am trying to make myself clear, your Honor, is that a machine can be considered from two different standpoints, purely from a mechanical standpoint, and also from the economic or utility standpoint.

"The Master: What we are trying to get at is the relative values.

"The Witness: How many economic factors have I mentioned, just one?

"The Master: You were talking about signs.

"A. About the signs, that's the first one. Well, I would say the sign is worth from five to ten, take a minimum of five per cent. The housing, its being completely enclosed so as to prevent any accidental touching or moving of the counter force system or indicator or the intentional tampering therewith, is a factor that's worth ten per cent from an economic standpoint.

"Mr. Zane: Give the minimum.

"A. As a minimum. The lever system and combination of a platform and indicating scale is worth twenty per cent. The leveling devices—Well, I should include in that twenty per cent also,

if your Honor please, that there is an element there that has economic value of robust appearance and color, and that has an economic factor.

"Mr. Meads:

"Q. That is part of what?
"A. The combination of a platform and indicating counter scale.
"The Master: As I understand, that's included in the twenty per cent that you just gave?
"A. In the twenty per cent.

"Mr. Meads:

"Q. All right.
"A. A dash-pot——
"Mr. Zane: Well, you were on leveling devices.
"A. Pardon me. The leveling devices, namely, the levels, so they can be easily used by the user of the scale is worth five per cent. The dash-pot and shock absorber——
"The Master: Didn't you go over those?
"Mr. Zane: He went over them from the mechanical stand-
1171 point. Now, your Honor, he says he is giving them from the economical standpoint, whatever that much abused word may cover.
"Mr. Meads: In other words, he is putting this in relation to what he started to do with the signs and those things.
"The Witness: Not from the economical but from the economic, if you please.
"Mr. Zane: The dash-pot, what is this?
"A. Dash-pot and shock absorber.
"Mr. Zane: How much is that worth, continue please.
"A. Roughly from five to ten per cent.
"Mr. Zane: Minimum five, is that what you mean?
"A. Yes. The correctness of indications, namely, the divisions on whatever particular chart is used, two to five per cent.
"Mr. Zane: Won't you give your minimums so we will have those?
"A. Two per cent.
"The Master: The witness said the lower figure was always the minimum.
"A. (continued). The sufficiently wide opening with correct reference marks on the customer's and dealer's side five to ten per cent, a minimum of—well, I will place that only two to five per cent, a minimum of two per cent. The particular form of indicating device two to five per cent, and the counter force system the rest, as the balance of the per cent.
"Mr. Zane: How much?
"A. May I have the stenographer read the other percentages, I can't keep those in mind.
"Mr. Zane: All right.

"Mr. Meads:

"Q. The balance of the one hundred per cent?
"A. I am trying to make up one hundred.
"Mr. Meads: That would be forth-nine. That's better than I could have done. Take the witness.

Cross-examination.

By Mr. Zane:

"Q. You are now employed by the Fairbanks Company, the Fairbanks Company of New York?
"A. Yes, sir.
"Q. What is the name of that Company?
"A. The Fairbanks Company.
1172 "Q. And you are in what is called its service department?
"A. Yes, sir.
"Q. What is your salary?

"Mr. Meads: I object as an imposition. He will admit, if you want it, he gets some salary, but I think that's an unfair inquisition into the affairs of this witness.
"Mr. Zane: The salary tests the value.
"The Master: Objection sustained.

"Mr. Zane:

"Q. And you say your duties consist in giving advice as to the kind of a scale for a man to install, is that one of your duties?
"A. Yes, sir, kind but not make.
"Q. How far from New York City do your duties take you in giving advice?
"A. New York City, New Jersey.
"Q. How much of New Jersey?
"A. All of New Jersey.
"Q. Anywhere else?
"A. I go wherever any of the clients want me to go.
"Q. Well, what places, where, where do you go?
"A. Albany, Poughkeepsie, Boston, Washington.
"Q. Washington, District of Columbia?
"A. Yes.
"Q. Is that for the purpose of giving advice to customers on scales?
"A. If they want me to, yes.
"Q. Do you as a matter of fact do it?
"A. Yes.
"Q. Do your clients, as you call them, pay your expenses?
"A. Yes.
"Q. When you go out on trips of that kind do you receive any expense money from the Fairbanks Company?
"A. Sometimes and sometimes not.

"Q. So as a matter of fact you have two kinds of employers, you have clients who employ you for your valuable advice and the Fairbanks Company whom you serve in the service departments?

"A. Yes, sir.

"Q. Well, have you any idea how many of those clients you have in the course of a year?

"A. Why, yes, I would say about a hundred.

1173 "Q. Do they send for you and pay your expenses in regard to the installation of one scale?

"A. Sometimes.

"Q. Have you ever had a client in Washington that had one scale installed that paid you traveling expenses for your advice?

"A. To install a scale, no.

"Q. I asked for advice about a single scale, where the customer desired a single scale did you have anything of that kind?

"A. No.

"Q. Now, the Fairbanks Company hired you for their service department, what do you do for the Fairbanks Company in that service department?

"A. Why, certain concerns want their scales and weights and measures periodically gone over and tested to see how accurately they weigh or want some of the goods which they put up weighed to see whether they are correct as to weight or measure, and want advice on various matters relating to their weighing matters in their plant or store.

"Q. Well, when you go out——

"Mr. Meads: Finish your answer. Don't let him interrupt you.

"Mr. Zane: I thought he was through, at least I hoped so. Go on and finish.

"A. That's all.

"Q. When you go out on that kind of a trip are your expenses paid by this customer who desires their scales regulated and tested?

"A. Yes, indirectly always.

"Q. What do you mean indirectly?

"A. Well, generally the expense account is handed in to the Fairbanks Company and the Fairbanks Company charges *it* up to them.

"Q. Charges it up to the customer?

"A. Yes.

"Q. Well, what else do you do in that service department for the Fairbanks Company?

"A. Those are the functions of the service department.

"Q. Nothing else, you don't repair scales?

"A. No, sir, we make such adjustments which may be considered as repairs which can be made in place.

1174 "Q. Sometimes you say you go and see a customer about buying a scale?

"A. Yes, that's to help out this scale department and has nothing to do with the service department.

"Q. That of course is a scale of the Fairbanks Company?
"A. Yes.
"Q. And not of anybody else?
"A. No.
"Q. And do the Fairbanks Company make a computing scale?
"A. Yes.
"Q. What kind of a computing scale?
"A. It is a fan-shaped computing scale, fan and platform computing scale.
"Q. Yes. That does not mean much to us. Go on with a further description, surely you can give us a better idea of it than that.
"A. The indicating mechanism on that scale is a pointer moving in front of a fixed fan which fan is divided in weight graduations up to ten pounds and it has a side beam which weighs up to forty pounds.
"Q. Yes, but your counterbalancing system is the most important thing about this scale of yours, scale of percentages, what was the counterbalancing system?
"A. The counterbalancing system is the pendulum.
"Q. A pendulum?
"A. Yes, sir.
"Q. Your scale of course has a scale beam?
"A. Yes, sir.
"Q. What you call a lever?
"A. A scale beam is a lever, but that's not what you would call a lever system in a scale, the beam.
"Q. Your scale beam is fulcrumed between the support of the platform and the inner end of the beam?
"A. I don't understand that question.
"Q. Well, we will go at it in another way: Where is the fulcrum of your scale beam?
"A. Of the scale beam, why, the fulcrum of the scale beam is between the connection to the platform and the end of the beam and the poise.
"Q. That's the inner end of the beam?
"A. I don't know what you call the inner and outer end. It is a connection between the platform and a sliding poise or the counter poise weights as the case may be.
1175 "Q. Now, what you call the pendulum is attached to the scale beam, is it, connected with the scale beam?
"A. Indirectly, yes.
"Q. How?
"A. By means of a connection from the beam, simply a link.
"Q. A link and hook?
"A. Yes.
"Q. Do you have a disc at the end of your scale beam through which the connection with the link and hook is made?
"A. A disc?
"Q. A disc.
"A. No, we have no disc.

"Q. Then your connection is direct?

"A. In a fan shaped scale?

"Q. I am talking about your fan shaped computing scale. Your connection is directly from the end of the beam by means of a hook and link to the pendulum, is that what you mean to say?

"A. Yes.

"Q. Is your chart, your fan chart, divided into equal spaces for the pound graduate all the way across the chart?

"A. Yes, sir.

"Q. What is your compensating mechanism for securing uniformity so that the movement of the pendulum will register evenly on the chart, at different places on the chart?

"A. A band passing over a cam which is attached to the pendulum.

"Q. Is it a strap band passing——

"A. In principle substantially the same as that. (Indicating Exhibit 55.)

"Q. The same as that?

"A. In principle substantially the same.

"Q. Now, what is the connection, is your cam connected with any indicating mechanism?

"A. Certainly.

"Q. Through the strap?

"A. Certainly.

"Q. And is your indicating mechanism a fan with an index moving across the fan?

"A. Index moving across the fixed computing chart which is fan shaped.

"Q. Now, your scale in general appearance, that is, the
1176 outline of the scale is very much the same as the Toledo fan pendulum scale, is it not?

"A. Why, no, I should not say that.

"Q. What is the difference?

"A. It is a little different form of a scale, it look like, very much like the Stimpson computing scale, in fact it was designed by Mr. Stimpson as I understand.

"Q. Well, the general appearance of your scale is a scale base and practically parallel with the scale base the scale beam?

"A. Yes.

"Q. And as you face the scale from the operator's side at the left hand end of the beam you have your pendulum suspended and a cam and a strap passing over the cam and then above that is your dial.

"A. Broadly speaking, the same general appearance.

"Q. The same general appearance as the thousands of fan scales and all fan computing automatic scales are of that general appearance, are they not?

"A. Where the fan faces the customer and back of it on the base is a platform, the same general appearance, it is substantially the same in most of them.

"Q. Now, does your chart register for the computations above the ten pound capacity?

"A. Does the chart register computations above the ten pounds, no, it gives both units up to ten pounds.

"Q. Up to ten pounds it is a computing chart?

"A. Computing chart.

"Q. For the remaining thirty pounds of your forty pound capacity it is simply a weighing scale?

"A. It is a weighing scale, you can compute on it.

"Q. How?

"A. By simply multiplying all the computations.

"Q. But the operator has to do that in his head?

"A. Yes.

"Q. You have no marks on the scale indicator?

"A. No, substantially a computing chart up to ten pounds. There is a drum right in front of the beam which automatically revolves and you have to add that computed figure to the one above indicated, but it does not automatically add the two. The beam in front is like, if I may refer your Honor to one of the early styles of Dayton drums that were on the beam, a beam like that which is, how-
1177 ever, automatically turned as the price moves forward and you add those two values together; it computes up to the full capacity but you have to add the two together.

"Q. That's something on the scale beam?

"A. That's something on the scale beam.

"Q. And that has computations on it?

"A. Yes.

"Q. And as that revolves you can add those computations to the computations on the chart?

"A. Exactly.

"Q. And get a result above ten pounds?

"A. Yes.

"Q. Have you made a scale of the variety you have spoken of where you have mounted your chart on a pair of upright arms operating your indicating mechanism by means of a rack and pinion, have you made that kind of a computing chart?

"A. No, no.

"Q. Then your chart is divided into the value computations according to the rule that you divide the pound graduate into as many parts as there are cents in the price per pound?

"A. Into as many parts——

"Q. As there are cents in the price per pound?

"A. I don't quite understand that question. Will you read that?

"Q. If you can't understand that, I will put it in a simpler way to you. The pound graduate at five cents a pound is divided into five parts.

"A. Oh, I see what you mean, I misunderstood your question. Where the figures, the price computing figures on a certain value per pound are graduated so that they are for five cents a pound, it shows five cents.

"Q. Of course.

"A. And eight ounces it shows at eight ounces or it would not show anything, it would be half way between the two and three cents.

"Q. In other words, the space of the pound graduate on your balance for five cents a pound is divided into five equal parts?

"A. Yes.

"Q. For nine cents a pound it is divided into nine equal parts, the pound graduate space?

1178 "A. Yes, I see what you mean.

"Q. For seventeen cents a pound the pound graduate space is divided into seventeen parts, equal parts, is it not?

"A. Yes.

"Q. Did you ever see a weight, a test weight, of a fifth of a pound?

"A. Why, I have personally seen a test weight of a fifth of a pound, yes.

"Q. Have made them?

"A. It just happens that a fifth of a pound I have seen and have personally made, but not as a commercial proposition, that's all.

"Q. Have you ever seen such a test weight as a seventeenth of a pound?

"A. No, sir.

"Q. Have you ever seen such a test weight as a ninth of a pound?

"A. No, sir.

"Q. If you divide your number of ounces in the pound by nine, the resulting figure is on an endless fraction, is it not?

"A. Yes.

"Q. Do you know how you arrived exactly at a fifth of a pound for a test weight?

"A. There is no such thing as absolute accuracy.

"Q. No.

"A. There is no such thing. You take it down to the nearest, to the smallest weight that you can determine. For that reason every commercial proposition and every weights and measures bureau establishes certain definite tolerances.

"Q. We are not talking about tolerances now.

"A. This is a matter of how much?

"Q. We are talking about how you get such a test weight as a fifth of a pound.

"A. Take it down to the nearest fraction of a grain.

"Q. Carry it down to grains and take the nearest fraction?

"A. Yes.

"Q. Your fraction carried how much?

"A. That depends upon the sensitiveness of the balancing device you are using to adjust it.

"Q. Sometimes your fifth of a pound is made according to a fraction carried out to a certain extent and sometimes it is made

1179 according to a fraction carried out to a further extent?

"A. It all depends upon what you want to use the weight for; if it is a precise weight, you carry it a great deal farther than not.

"Q. Answer the question yes or no.

(Question read.)

"A. Yes.

"Q. Now, do you know originally how such a weight as a fifth of a pound was arrived at actually, was it by a system of testing, experimenting to ascertain what a fifth of a pound was?

"A. The way that fifth of a pound would be ascertained would be by taking a standard pound, namely, a pound called a standard which had been certified as to its accuracy by a pound standard of the bureau of standards, and that being referred to by law in the standards at Washington and a copy of this standard certified to by the bureau of standards would be taken as the basis and that could be subdivided into ounces and into grains and so on and you would gradually arrive at it that way.

"Q. How did you arrive at a fraction of a grain?

"A. At a fraction of a grain?

"Q. Have you any such test weight?

"A. Why, certainly, to a thousandth of a grain.

"Q. Yes, thousandth of a grain, and by your division you get as close to the fraction as you can?

"A. Certainly.

"Q. That's the way you go ahead to get your test weight for a fifth of a pound?

"A. Certainly.

"Q Is there any such weight known to the law?

"A. As a fifth of a pound?

"Q. As a fifth of a pound.

"A. No, sir.

"Q. Hence when you are weighing a fifth of a pound you are weighing in weights not known to the law?

"A. Yes, sir. I mean statute laws as laid down.

"Q. When were you first spoken to about coming to testify in this case?

"A. Let's see, I can give you the exact date I think, about ten days ago.

"Q. Was it by letter or by telegraph or how?

1180 "A. Telephone call.

"Q. Telephone call?

"A. Yes.

"Q. From whom did the telephone call come?

"A. Mr. Theobald, John Theobald,

"Q. Where was he at the time, purported to be?

"A. In Philadelphia.

"Q. And were you directed to come to Chicago?

"A. No, he asked if I could act as an expert in a matter which was in relation to weighing instruments and I said I could.

"Q. Did he tell you what particular line your testimony was to be on?

"A. No, just along the line of weighing instruments.

"Q. Well, did you have any conversation with him as to your compensation?

"A. Yes.
"Q. What compensation did you mention or did he mention?

"Mr. Meads: I object. I have no objection to it appearing in the record that he gets compensation if you want, but as to the amount I object for the same reason.
"The Master: Objection overruled.

"Mr. Zane:

"Q. The amount of your compensation?

"Mr. Meads: Whether John Theobald said anything to you about the amount of your compensation is the question.

"A. I told him I would charge fifty dollars a day and expenses and he said that would be satisfactory as far as he knew.
"Q. Did you ever have any dealings with the Toledo Scale Company before that time?
"A. No, sir, none whatever.
"Q. When you were sealer did you ever have any dealings with them at all?
"A. No, sir, except official.
"Q. Official as sealer?
"A. Oh, yes, with every scale company.
"Q. Did you ever receive any amount of any kind from the Toledo Scale Company directly or indirectly?
"A. Absolutely not.
"Q. Have you ever been an expert witness in a matter of this particular kind before?
"A. Yes, sir.
1181 "Q. Have you ever undertaken before to divide a scale up into percentages of parts?
"A. You mean before a court?
"Q. Before this time you testified?
"A. No, not before a court, no.
"Q. You never have?
"A. No, not before a court.
"Q. Now, when did you next have any conversation with anybody for the Toledo Scale Company in regard to your testimony after John Theobald?
"A. Mr. Meads.
"Q. Where was that?
"A. In Chicago.
"Q. When was that?
"A. That was one day week before last, was it not, on a Friday, I think it was week before last.
"Q. And have you been here ever since?
"A. No, sir.
"Q. Where did you go then after that conversation?
"A. Went back to New York.
"Q. Now, in that conversation with Mr. Meads did he explain to you what you were desired to testify about?

"A. Yes, sir. Do you want me to state what he stated?
"Q. I mean generally the conversation.
"A. Yes, just the general subject of what I considered an an-lysis of the scale.
"Q. And relative percentages of the different parts?
"A. Yes, sir.
"Q. You talked that over with him?
"A. Yes, sir, I gave him my version of it.
"Q. Did he make any suggestions?
"A. He made some suggestions and some objections, but I have stated here just what I stated to him.
"Q. His suggestions or objections you didn't adopt?
"A. Yes.
"Q. What?
"A. Yes, sir, I did not adopt them.
"Q. Now when you are selling a fan scale do you claim that it is superior to a cylinder scale?
"A. No.
"Q. You make no comparisons as to the relative efficiency of the two types of scales?
"A. No.
1182 "Q. By the way, what is the selling price of your fan scale?
"A. One hundred dollars.
"Q. Is that an electric lighted scale?
"A. No.
"Q. Are any of them electric lighted?
"A. No, sir.
"Q. None of your fans?
"A. No, sir.
"Q. Have any of your fan scales any signs on them?
"A. Yes, they have got the sign 'Fairbanks' on them.
"Q. Any other?
"A. No.
"Q. Don't you put on your scale this splendid design about honest weight?
"A. No, sir.
"Q. You assume that your scale is honest and that the public will accept it as honest without your saying it is honest?
"A. That's a question; we assume the Fairbanks name is enough to carry anything.
"A. That that's a guarantee that it is an honest scale?
"A. Absolutely, that's a guarantee of accuracy.
"Q. So you don't find it necessary to put signs on your scales that they are honest?
"A. No, sir, of any kind.
"Q. Well, does that detract, the failore to have a sign on there that it is honest, does that detract from the value of yous Fairbanks computing automatic scales?
"A. Well, our attitude is altogether different. Our attitude is simply that Fairbanks——

"Q. Oh, answer my question. Does the want of that sign about honest weight detract from the value of your automatic computing fan-shaped pendulum scale?

"A. As a mechanical device it does not.

"Q. Well, does it detract from it as a selling proposition?

"A. I think it does.

"Q. You think it would be a good thing to have on your scale that it is an honest weight scale?

"A. I think that any provision for signs is a good thing on an expensive piece of mechanism like a computing scale.

"Q. Well, anything more than the sign of the maker?

1183 "A. Yes, I think so.

Q. You don't have on your scale a sign "no springs," do you?

"A. No, sir.

"Q. And yet your scale is a pendulum?

"A. Yes, sir.

"Q. So your scale, your fan-shaped pendulum automatic computing scale, is only semi-automatic?

"A. Oh, yes, I would call it a semi-automatic computing scale because if you put a weight on there beyond ten pounds, you have to perform a hand operation.

"Q. So that it is really so far as the capacity is concerned one-quarter automatic?

"A. Yes, one-quarter automatic.

"Q. Now, you have mentioned what are the elements of an automatic platform computing and weighing scale?

"A. Yes, sir.

"A. Every one of those elements that you mentioned are necessary elements, are they?

"A. Every one of those elements in a platform automatic computing scale are necessary elements.

"Q. And the scale would not be a scale without any one of those elements?

"A. Yes, the machine, if you take out any part of it, would no longer function as a complete machine.

"Q. Well, but you have given us an ideal automatic computing platform scale. Now, if you remove any one of the nine elements you enumerated from that ideal scale, it would cease to be a weighing computing automatic scale, would it?

"A. No, it would be one in need of repairs.

"Q. What element could you remove?

"A. Well, take for instance any scale, take one of the levels out of it, you could no longer weigh on it.

"Q. It would not weigh?

"A. No, you could substitute another lever and she would weigh.

"Q. But in the condition in which it stands, taking any one of your nine elements, with any one of those elements taken out the scale will neither weigh——

"A. So it can be used.

"Q. Wait a minute—neither weigh nor compute, is that what you mean to say?

"A. Until that is replaced.

1184 "Q. Until that part is replaced. Of course, your counter force system is an absolute necessity?

"A. Absolutely on an indicating scale.

"Q. Your dash-pot is an absolute necessity?

"A. Yes, sir.

"Q. The scale will not operate without the dash-pot?

"A. Not properly.

"Q. It will not function as a proper automatic comp-ting scale unless the dash-pot is present?

"A. Yes, sir, that's true.

"Q. Look at the De Vilbiss patent, Exhibit No. 37, and tell me if you see in that drawing any dash-pot.

"A. No, sir, I do not.

"Q. Then you would say that that scale shown therein by the drawing would not function as an automatic computing scale?

"A. It would be mighty hard to read because she would vibrate back and forth.

"Q. Answer the question. Would you say that that scale shown in that drawing would not function as an automatic computing scale?

"A. It will function as an automatic computing scale, but you would not want to read it.

"Q. Answer the question yes or no.

"A. Yes.

"Q. It will function?

"A. Yes.

"Q. Then you- dash-pot is not necessary?

"A. Not an absolute necessity——

"Q. No.

"A. —as to the weighing mechanism.

"Q. Is it necessary as to the computing mechanism?

"A. No.

"Q. Look at that scale drawing that you have there in that patent and tell me if you have delineated there a shock absorber?

"A. Why, I should say no; no, there is no shock absorber there, no shock absorber shown.

"Q. So the shock absorber is not an absolute necessity for a computing automatic scale to function?

"The Witness (to the Master): May I ask the counsel a question?

"The Master: If you do not understand his question.

"A. I can't answer that yes or no, it takes explanation.

1185 "Mr. Zane:

"Q. Well, let me put the question in another way: As you see that drawing there without any shock absorber, will that scale delineated in that drawing of Defendant's Exhibit 37 accurately register weights and computed values for things placed upon the platform of the scale?

"A. It might, but probably would not for any length of time.

"Q. Then you would say that your shock absorber is not an absolute necessity?

"A. To make one weigh, no, but to have any use of the scale it would be absolutely necessary to my mind.

"Q. Yes, after continuous use of the scale the scale would become worthless?

"A. Exactly, just like the ordinary spring hanging dial scale, you know after a short time she does not function any more.

"Q. Do you know when the Toledo Scale Company put the shock absorber on its cylinder scales?

A. I do not.

"Q. Do you know whether they did not put a shock absorber on their cylinder scales until three years ago?

"A. I do not.

"Q. You don't know then whether during this accounting period, assuming the accounting period ended in September, 1912, whether they had any shock absorber on their cylinder scales before that or not, do you?

"A. Why, I have seen shock absorbers on the scales before that, but as to when they put them on I have not the remotest idea and I don't know personally whether they ever made some without them or whether they always made them with them. That's a question I could not say. I do know that on scales I have seen since 1907 or 1908 I have seen them with shock absorbers in the racks and I would not even say I have seen them in all the racks.

"Q. In 1907 and 1908?

"A. In 1907 and 1908 I am pretty sure there were shock absorbers on some of their scales if my memory serves me—that's a question of memory.

"Q. Have you seen any of the testimony in this case?

"A. I have absolutely seen none of it.

"Q. Have you seen any testimony of Mr. Theobald?

"A. None at all.

1186 "Q. That the shock absorber was not put on until July, 1910?

"A. I didn't see any of it. I say that's my memory. I could not say whether they had them on there or not.

"Q. No.

"A. But they should be on there.

"Q. Then, if I understand you properly, except as to prevent wear to the scale the shock absorber is not necessary?

"A. It also has one other function, and, well, besides the question of wear it has one other function which is largely, however, taken up by the dash-pot, that is, to prevent the jumping of the parts.

"Q. But the dash-pot is supposed to overcome the oscillation?

"A. Yes, it is supposed to overcome the oscillation.

"Q. And therefore you would say the shock absorber——

"A. The primary function is to prevent wear and injury to the motion translation device.

"Q. And therefore except to prevent wear, it is not necessary to the automatic computing scale at all?

"A. From my standpoint really some form is.

"Q. I say except to prevent wear.

"A. Except to prevent wear, it might not be, no.

"Q. Now, are the openings in the housing, especially on the customer's side, a necessary matter to the functioning of the scale?

"A. From my point of view absolutely.

"Q. Does that opening help in weighing at all?

"A. Yes, because what you want to do in weighing is to get results and you have got to let the other people see it because I am prejudiced on account of my affiliation in the State of New York.

"Q. That opening on the customer's side only has reference to the customer's seeing?

"A. Yes, sir, to help the customer check up.

"Q. And it has nothing to do with the operation of the scale in weighing or computing, has it, the operation of the scale?

"A. Yes, because——

"Q. Does it change the operation of the scale?

"A. You don't weigh until you see the weighing, this lets you see it.

"Q. How does that change the actual weighing?

1187 "A. It does not change the leverage or the counter force system, but to my mind it is an essential part of the scale.

"Q. An opening on the dealer's side to see what is being weighed and the computation is of course necessary, is it not?

"A. Yes.

"Q. You could not have a solid housing upon that consideration?

"A. Certainly not.

"Q. Of course.

"A. But from my point of view it is just as necessary as the other.

"Q. Well, you said it has nothing to do with the operation of the scale, it does not assist in the accuracy of weighing, does it?

"A. It does not assist in the accuracy of weighing.

"Q. No, it does not assist in the accuracy of the computation, does it?

"A. No, certainly not.

"Q. It is simply information to the customer.

"A. To let the customer see what the computation is.

"Q. It is simply information to the customer?

"A. Yes, necessary information to the customer.

"Mr. Zane: I move to strike it out.

"The Master: Strike it out.

"Mr. Meads: Before you put another question on that, I don't know whether the court has forgotten, the very thing which they are interrogating the witness about now was one of the patents which the sworn bill said we had appropriated.

(Discussion.)

"Mr. Meads: If the court struck it out because it is not responsive, I withdraw the objection.

"The Master: The witness should not argue with counsel, it is sufficient for him to answer the questions put. I am ruling on the answer as not being responsive to the question and as argumentative.

"Mr. Zane:

"Q. Now, Mr. Reichman, the opening on the customer's side only shows the weight indication?

"A. Yes.

"Q. It does not show the computation at all?

"A. No, sir.

"Q. Therefore it is not a necessity to the operation of the scale as a weighing and computing scale, is it?

1188 "The Witness: Your Honor, I can't answer that question because I have got to answer it from my standpoint, and from my standpoint it is a necessity for the customer to know, as a mechanical device it is not necessary.

"Q. I said weighing and computing scale.

"A. No.

"Q. You don't show the computation to the customer, do you?

"A. No.

"Q. Therefore it is not necessary to the scale as a weighing and computing scale?

"A. No I will say no.

"Q. Now, indicating mechanism is, of course, necessary to any automatic computing scale?

"A. Certainly.

"Q. Now, the next element is the seventh which you had, the mounting or supporting of the indicating mechanism. That is of course necessary?

"A. Absolutely.

"Q. You have got to have your indicating mechanism supported some way?

"A. It has got to be properly supported.

"Q. Now, your eighth necessary element is an enclosed housing or an enclosing housing, did you say enclosed or enclosing?

"A. I thought I said enclosing housing.

"Q. Enclosing?

"A. Yes.

"Q. That, of course, does not assist in the operation of the scale in the mere act of weighing and computing?

"A. Yes.

"Q. *Ot os* a preventive against dust, is it not?

"A. It also adds rigidity to the whole framework, it is highly important.

"Q. The housing assists in the rigidity?

"A. I think so, no question of it.

"Q. And you consider it necessary on that account?

"A. I do, to have rigidity.

"Q. The rigidity could be given if you made your support solid enough, could it not?

"A. It might be, certainly.

"Q. You can make a perfectly rigid skeleton frame, can you not?

"A. Yes.

1189 "Q. Therefore your enclosing housing is not necessary to rigidity, is it?

"A. No, not necessary to rigidity, but it makes it more rigid, whatever you have.

"Q. Now, you consider the leveling devices, an artificial leveling device, an absolute necessity on any kind of an automatic computing scale?

"A. I do.

"Q. In any kind of an automatic computing scale is the eye sufficient to level by?

"A. To my mind, no, it is not.

"Q. Do you consider a leveling device that operates in two directions, one at right angles to the other, to be necessary?

"A. It is necessary to have some device which you can read in two directions.

"Q. In two directions?

"A. Yes, certainly. Of course, that may be a circular level.

"Q. That's an absolute necessity?

"A. To my mind absolute necessity.

"Q. Do you know how long the Toledo Scale Company had had a level that can be read in two directions on their cylinder scale?

"A. I do not, but the law in those states requires it now.

"Mr. Zane: Move to strike out the statement as to what the law requires.

"The Master: It may be stricken as not responsive.

"Mr. Zane:

"Q. In that blue scale over there which is called Complainant's Exhibit of Defendant's Scale do you see a level operating in two directions?

"A. I am sure I don't remember. I looked at that yesterday, and if you will pardon me I will look at it now. No, there is only a level acting in one direction.

"Q. So you would say that that blue scale does not contain one of your necessities, would you?

"A. No, unless they use the pendulum as the other leveling device, not one of my necessities.

"Q. That was your ninth necessity?

"A. Yes.

"Q. Now, it turns out of your necessary matters the things you say are absolutely necessary to the scale, to you as a scale, are the

counter force system, the supporting base and levers sup-
1190 ported, the indicating mechanism, the mounting or support of the indicating mechanism; you can have a scale that would weigh and compute correctly with just those elements, could you not?

"A. There is one omission there and that is, unless it is included in the counter force system, the connection between the indicating mechanism and the counter force system.

"Q. You have got your nine, of course the different parts would have to be connected?

"A. Yes.

"Q. But with those parts connected your scale would be complete?

"A. Yes, sir.

"Q. Now, of course, the device of a shock absorber is a very old thing, is it not?

"A. Shock absorber, oh my, yes, shock absorbers have been used on scientific instruments for probably at least one hundred years.

"Q. Well, it has been used on scales for at least forty years, has it not?

"A. Shock absorbers on scales, why, I don't know whether it is forty years, but certainly quite a number of years.

"Q. A great many years?

"A. Oh, yes, I should say at least twenty or twenty-five.

"Q. Yes. The pendulum scale is a very old scale, is it not, a counter balance system consisting of a pendulum?

"A. A counter force system in the form of a pendulum?

"Q. Yes.

"A. Oh, yes, that's a very old device.

"Q. That's very old. How many years would you say?

"A. Roughly about three hundred.

"Q. Didn't I ask you about the dash-pot, whether that was very old?

"A. No, you did not.

"Q. Well, the dash-pot for taking up the oscillation of a scale is very old, is it not?

"A. Why, I don't know on a scale, I am not sure, I doubt it; a dash-pot as a means of damping vibrations of course is a very old matter.

"Q. But a dash-pot on a scale is a very old thing, is it not?

"A. I could not answer that. I don't know how old the liquid dash-pot is on a scale.

"Q. You would be very much surprised if the dash-pot had not been used for a long time in order to stop the oscillations on a scale, would you not?

1191 "A. Yes.

"Q. Now, I want to draw your attention to a patent of the Richards automatic weighing machine, patented July 6, 1897, and to the drawings of that patent and ask you if you do not see on that drawing a dash-pot filled with liquid and a piston working therein?

"A. Why, I should judge from the drawing that that's not a dash-pot but simply a weight that's raised up and down. I can't tell from the drawing whether that weight is supposed to come out of the liquid or not, it would have a dash-pot effect anyway.

"Q. Can't you see it is a piston playing up and down in liquid in a pot?

"A. I don't know from that drawing, it would appear so, yes; at any rate it would have a damping effect.

"Q. Now, if you look at the drawing, you see where it is situated on the scale, don't you?

"A. Yes. That, however, in that drawing is not used in the sense of a dash-pot to stop oscillations but is a dash-pot to make a lever go down slowly, it has substantially the same effect.

"Q. The same effect?

"A. Substantially.

"Mr. Meads: It is like a door spring?

"A. Yes.

"Mr. Zane:

"Q. Now, I show you an older patent.

"Mr. Meads: I don't see how this is cross examination. It is not for the purpose of contradicting something the witness said.

"The Master: It tends to show his knowledge of the subject about which he is testifying.

"Mr. Zane:

"Q. Of the Wolner weighing machine, patented June 19, 1888. Don't you see a dash-pot there with a cylinder working in it?

"A. There is a liquid dash-pot with a cylinder.

"Q. Working in it, and it is put at one end of the beam to control the oscillation of the beam, is it not?

"A. No, no, it is not put on there for the purpose of controlling oscillation. It is put on there, as indicated on this drawing, when you turn this wheel the chain pulls this up so you can't get a sudden jar.

"Q. It is to overcome shock?

"A. To overcome sudden shock, but not for the purpose of stopping oscillation there.

1192 "Q. You see there are two dash-pots here, one on each end of the beam, don't you?

"A. Yes.

"Q. You see in the specifications for that patent that the plunger boxes J and J', those are these two cylinders?

"A. That's just what I said, for the purpose of enabling a slow and steady motion.

"Q. And that would overcome oscillation on the beam?

"A. If there were any, but there would not be any there because you pull up directly on here and this chain would still be connected

to that when this would oscillate, and consequently would not have any damping effect.

"Q. But there is an even balanced scale and you have a dash-pot on each beam?

"A. But you have a chain connection which pulls up on this and it is to dampen the pull; it is a dash-pot, but not to stop any oscillation.

"Q. And a dash-pot on a scale, is it not?

"A. Anything that has a plunger moving in a liquid would be called a dash-pot of course.

"Q. Now, I will show you a still older patent, an English patent of 1877, for a certain indicating weighing machine, and ask you if in this drawing you see a dash-pot.

"A. There may be one in there, but I don't see it.

"Q. Find the letter D.

"A. The letter D. Let's see how that works over there. Well, that is not a dash-pot, that's an air dampening device.

"Q. Don't you see the specification says: 'The paddle B working in the semicircular box or tank D which contains the fluid is effectively checked from vibration by the resistance of the fluid?

"A. All right, you would call it a dash-pot if he has liquid in it.

"Q. That is a dash-pot in this older English patent of 1877?

"A. Yes, that's a dash-pot. It does not appear so clear until you read the specifications what this part is.

"Q. Yes. Now, in the English patent of 1888, that drawing, do you see a dash-pot?

"A. Yes, there is a dampening vein in there moving in the liquid in a tank down below there.

"Q. So after looking at those patents you are confirmed in your impression that a dash-pot to overcome the movement in a scale is an old device?

1193 "A. Yes.

"Q. And goes back at least as far as 1877?

"A. Yes.

"Q. And you would not contend that the dash-pot is not something that was open to the public for everybody to use, would you?

"Mr. Meads: I object. He has not made any such statement.

"Mr. Zane: I am asking the question.

"The Master: Objection overruled.

"Mr. Zane:

"Q. You would not contend that, would you?

"A. That any one had a right to use a dash-pot?

"Q. Yes.

"A. Why, of course, a person could use a dash-pot.

"Q. On a scale?

"A. Yes.

"Q. To overcome the vibration?

"A. Certainly, I would not hesitate to use one.

"Q. Now, you say your acquaintance with the Toledo platform automatic computing scale began in 1904?

"A. Yes.

"Q. Where did you first see one?

"A. Saw them over in Boston, Cambridge, around in that neighborhood, in the vicinity of Boston.

"Q. They were not cylinder scales, were they?

"A. No, I think most of them were fan shaped scales. Yes, I think before 1906 I saw them, no, I won't say I did. It was about the time I took the office of the weights and measures I first saw the cylinder computing scale.

"Q. What year did you first see a Toledo Computing cylinder?

"A. As near as I remember, in 1906.

"Q. What time in the year?

"A. Sometime late in the year, the latter part of the year, it might be in the beginning of 1907, as far as that's concerned.

"Q. About when were you examining scales in Massachusetts and Rhode Island?

"A. In 1904 and 1905 and the first part of 1906. I was probably in Boston or the western part of the state on the average of about once every two months.

"Q. You said in your direct testimony that you had been examining scales in Massachusetts and Rhode Island and that all of the scales of the Toledo Company that you examined were cylinder scales. What did you mean by that?

1194 "A. All the scales of the Toledo Company I examined were cylinder scales?

"Q. Yes, were cylinder scales that you examined in Massachusetts and Rhode Island, what did you mean by that?

"A. Why, no, no.

"Mr. Meads: He never said that.

"A. I didn't say that.

"Mr. Zane:

"Q. I am drawing your attention to your direct testimony, do you remember it?

"A. I would prefer to have the stenographer read that answer.

"Q. Do you remember giving any such testimony as that?

"A. Absolutely, no.

"Q. Since you went off the stand after giving that testimony did somebody draw your attention to the fact that the Toledo Company never got out cylinder scales until the latter part of 1906?

"A. They did not.

"The Witness: May I ask counsel a question?

"The Master: If there is something you don't understand.

"The Witness: Do I understand you to say there were no cylinder scales before 1906, no cylinder computing scales?

"Q. You never heard me say so. I don't know what Mr. Meads has told you.

"Mr. Meads (to the witness): Let him put questions.

"Mr. Zane: Now, you have spoken of two kinds of charts in computing scales. Which is the older chart of the two kinds you speak of?

"A. I do not know which is the older chart. The one in more common use as far as that is concerned was certainly the one which had a duplication of values.

"Q. Have you ever looked up anything connected with the patents to see——

"A. I have not.

"Q. —what was the older scale?

"A. I have not, no.

"Q. So you don't know——

"A. Which was the oldest one?

"Q. —that the oldest chart is the chart where the pound graduate is divided into as many equal parts as there are cents in the price per pound?

1195 "A. No, I don't know that.

"Q. You do not know that to be a fact?

"A. No.

"Q. You spoke of another second style of chart where certain value figures on the scale are duplicated. When was it that you saw the first chart of that kind?

"A. I should say about 1904 or 1905.

"Q. And you were at that time doing what?

"A. I was there at that time with W. & L. E. Gurley in Troy, New York.

"Q. Upon what kind of a scale did you see that chart?

"A. That was on a hanging cylinder scale.

"Q. Did you ever see that chart on a platform scale?

"A. Yes, yes, I saw charts of that kind on platform scales.

"Q. Now, the hanging cylinder scale you saw was what kind of a chart?

"A. That was a cylinder drum and a chart with repetition of values.

"Q. What was the scale called?

"A. It was called the Boston butcher's scale if I remember the name correctly, that's what it was called, Boston butcher's.

"Q. And the platform scale in which you saw that kind of a chart, what was that scale called?

"A. I don't know that it had any particular name except by the maker.

"Q. Yes, what was the name?

"A. It was a Dayton scale.

"Q. That was the Computing Scale Company of Dayton, Ohio?

"A. Yes.

"Q. Did you ever see that kind of a chart on any other scales than Boston butcher's scales and the scales made by the Dayton Company?

"A. No, I never saw them on any other.

"Q. And you never had seen the chart before 1904?

"A. No. I may have seen it, but never paid any attention to it.
"Q. Now, prior to that time you had seen the other kind of a chart on scales, had you not?
"A. I had seen charts on scales prior to that time, yes.
"Q. But you don't know now——
"A. I didn't differentiate between the two.
1196 "Q. Now, the essence of that chart that you speak of as the chart that does not duplicate value figures is, as you have stated, that the pound graduate is divided into as many equal parts as there are cents in the price per pound?
"A. Yes.
"Q. That's the kind of a chart it is?
"A. Yes.
"Q. And as you are following around the chart the column that belongs to the five cents price per pound, you have in the first pound the figures 1, 2, 3, 4, and at the end of the pound graduate the weight of one pound you have the figure 5?
"A. It might be that or might be more than that number of divisions.
"Q. Divided into half cents?
"A. Yes.
"Q. An ordinary commercial scale, have you seen it divided into half cents?
"A. No, I don't believe I ever have seen one divided into half cents.
"Q. No. Then as you go from one poind to two pounds the figures are 6, 7, 8, 9, and for two pounds the figure 10?
"A. Yes.
"Q. As you go from two pounds to three pounds the figures are 11, 12, 13, 14, and for three pounds the figure 15?
"A. Yes.
"Q. And so on around the chart to its thirty pound capacity?
"A. Yes.
"Q. And the thirty pounds would be marked as $1.50 in that five cent column?
"A. $1.50, yes.
"Q. And so it is with every other column?
"A. Yes.
"Q. Suppose your price per pound is 12½ cents, what do you find it divided into?
"A. Find it divided into twelve divisions per pound.
"Q. Well, is the pound graduated divided into——
"A. Twelve parts.
"Q. It is divided into twelve parts?
"A. Yes.
"Q. All right. In the twelve and one-half cent column on your chart you have the figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 in the first pound?
1197 "A. Yes.
"Q. From zero up to one pound those are the figures?
"A. Yes.

"Q. Does the figure 12 correspond to the one pound indication?
"A. No.
"Q. So what is done in that column is to mark off the space for the half cent?
"A. Yes.
"Q. And divide the rest of the pound graduate into 12 equal parts?
"A. Yes.
"Q. Just answer out loud?
"A. Yes.
"Q. Now then, your price of one pound does not correspond with any value figure on the chart at all in the 12½ cent column, does it?
"A. No.
"Q. And to weigh out one pound at 12½ cents on that scale, if you had not a weight graduate, you would have to weigh an amount where the indicator would fall half-way between the twelve and thirteen cents?
"A. Exactly.
"Q. And you would have to measure it by your eye?
"A. Yes, sir.
"Q. Now, that kind of a chart I understand you to say you do not know is the oldest chart on computing scales?
"A. No, I do not know that is the oldest chart.
"Q. I will draw your attention to a very old patent of a weighing scale where the prices per pound are indicated by the figures on that part of the drawing which is called N and then draw your attention to the specification, 'thus in the scale O opposite the number 12 of the scale N,' that is to say, the price per pound is 12 cents, 'the spacing through which that part of the beam C passes in weighing a pound is divided into 12 subdivisions as shown.' Now, do you see on the chart that the space is divided into 12 cent portions?
"A. Each figured part is supposed to be 5 cents there.
"Q. Yes. So that that scale is constructed on the principle of your chart, only instead of having an indication for every one cent they have an indication for every 5 cents?
"A. They have attempted to show an indication for one cent, but every 5 is only figured.
1198 "Q. Yes. You could tell every cent there, but it would not be by figures?
"A. No, it is not figured, it just has a mark.
"Q. A mark. Now, that is that type of table where the pound graduate is divided into as many parts as there are cents in the price per pound, is it not?
"A. Yes.
"Q. And you see that that patent is to Jesse S. Lake and Ezra B. Lake of Bridgeport, New Jersey, dated June 12, 1866?
"A. Yes, it so states.

"Mr. Meads: What's the number of that patent?
"Mr. Zane: 55,503, patented June 12, 1866.

"Q. Now, so far as you know that is the first scale that you know of that has the first principle chart of dividing the pound graduate into as many equal parts as there are cents in the price per pound, you have never seen anything older than that, have you?

"A. Not that I remember.

"Q. Now, do you know when the Boston butcher's scale was first made?

"A. Not by personal knowledge, no.

"Q. Well, assuming that the record in this case shows that the date of the patent re-issued April 28, 1896, so far as you know that is the first scale that used that second style of chart?

"A. Yes.

"Q. And assuming now that the record shows that in 1899 the Boston butcher's scale was brought by the Computing Scale Company of Dayton, Ohio, so far as you know nobody except the original patentee of that Boston butcher's scale and his grantee ever used that chart you speak of?

"A. The only one I ever remember seeing, yes.

"Q. Now, on that chart do you know how the computations are made of the Boston butcher's scale?

"A. How the computations are made?

"Q. Yes.

"A. Why, no, I don't know exactly how they are divided except that there are repetitions of values of figures at a certain price per pound.

"Q. Didn't you ever go into that chart and examine the chart to see whether the computations on the chart were correct?

"A. Yes, sir.

1199 "Q. Did you find that they had their value figures set in a horizontal row opposite each two ounces of weight in the weight graduate?

"A. They did.

"Q. Did you find that the calculations for those weight values were made by multiplying the price per pound into the weight?

"A. I don't know whether I did.

"Q. Well, did you see on that chart any fractions of a cent?

"A. No.

"Q. There are none, are there?

"A. No.

"Q. Did you find or ascertain the rule on that chart as to which in the calculation the fractions of a cent were disposed of?

"A. No.

"Q. Did you find that those calculations were all correct to this rule: Multiply the price by the weight; if you have a fraction of a cent that amounts to a half cent or more, the calculation calls for a whole cent; if it amounts to less than a half a cent, the calculation disregards it. Did you find that to be the rule on these calculations?

"A. I should say that was substantially the rule.

"Q. Well, don't you know it is actually the rule?

"A. I never measured each one up individually to find out whether that rule was exactly followed or not.

"Q. You don't know then whether that rule was followed or not?
"A. No.
"Q. On that chart a half a pound has certain figures in a horizontal row opposite it, has it not?
"A. That's true, yes.
"Q. At 4 cents a pound the figure opposite the first half pound in the 4 cent column is 2 cents, is it not?
"A. Yes.
"Q. At 5 cents a pound the figure opposite the half pound weight is 2 cents, is it not?
"A. I don't remember whether it is. If the memory serves me right, it is not, it was 3 cents.
"Q. Then you saw that the rule had been followed, that the fraction of a cent was 2½ and that was called 3?
"A. Well, roughly that rule was followed.
"Q. You can't follow a rule roughly, can you, you must follow it or you don't follow it when it is figures.
1200 "A. By visual inspection it ap*e*pars to be followed, although I never individually by calipers calipered any one chart.
"Q. You mean then by a rough examination you thought the rule was followed?
"A. Yes, if such a rule was followed, you would get horizontal divisions.
"Q. When you came to the 6 cent a pound column what did you find opposite the half pound weight?
"A. 3 cents.
"Q. When you came to the 7 cent column what did you find opposite the half pound weight?
"A. As I remember, four cents.
"Q. It was 2½ cents, on calculation called 4 cents?
"A. Yes.
"Q. Disposing of the fraction of the cent?
"A. Yes.
"Q. Did you find any figure on that chart that violated that rule that a fraction less than half a cent was disregarded, thrown away, in the calculation and a fraction of a half cent or more was called a whole cent, did you find anywhere on that chart any disregard of that rule?
"A. I don't know whether I did, I may have and may not, it was not a matter of inquiry with me.
"Q. Now, you said that on that chart there were subdivisions of the same value figure?
"A. Yes.
"Q. Well, so far as subdivisions of a value figure is concerned, they happen on the other chart to-, don't they?
"A. I never knew them to happen on the other chart by any of the makers of scales.
"Q. In the five cent column you have the figure 3, don't you?
"A. Yes.
"Q. In the six cent column you have the figure 3?
"A. That's not in the same row.

"Q. Do you mean to say on your No. 1 chart that your figures are in the same row?

"A. Yes, there would be duplication of values in the same column per price per pound.

"Q. Do you then on your chart you are talking about, the first kind of a chart, where the figures are put on on the principle of dividing the pound graduate into as many parts as there are cents in the price per pound, have a row of figures, horizontal row?

1201 "A. No, I have not said that. In one column or row, one column if you want to put it that way, or row, all the values, increasing values, money values of varying weights at a certain price per pound there were duplicates of values. Of couse, there were duplications.

"Q. Now, in your one cent or in your first class of chart you have no horizontal rows of figures at all, have you?

"A. You have no horizontal rows of figures?

"Q. Yes.

"A. Well, if you are speaking now of a cylinder chart——

"Q. I am speaking of the chart you have spoken of, the first kind of a chart in a cylinder, have you in that chart horizontal rows of figures?

"A. No.

"Q. There are no horizontal rows at all, are there, there can't be?

"A. No, unless you have a vertical chart.

"Q. The only criticism you make of that other chart is that for different weights in the same vertical row you have the same value figure?

"A. No, that is not the criticism.

"Q. What is your criticism?

"A. The criticism is that in a certain column of a certain value per pound at different weights you may have a duplication of values.

"Q. Yes, that is, the same value figure for different weights is found duplicated in the same vertical row?

"A. Yes.

"Mr. Meads: For different weights he says.

"A. Yes, for different weights.

"Mr. Zane:

"Q. Now, then, when you looked at the five cent column on that second style of scale which you say had duplications on it, you found a value put down for two ounces, did you?

"A. Value figure for two ounces?

"Q. Yes.

"A. In the five cent value?

"Q. In the five cent column.

"A. I don't think there was.

"Q. You didn't see one?

"A. I don't think there was a two ounce figure, I think the first figure on that was a one cent value.

"Q. And what was that opposite?

"A. That was opposite about a quarter of a pound, a little
1202 less than a quarter of a pound, it may have been about four ounces, I think something like that, but I don't remember seeing a value after the two ounce mark.

"Q. Now, at five cents a pound a multiplication of four ounces into five cents a pound gives you what result?

"A. A cent and a quarter.

"Q. A cent and a quarter?

"A. Yes.

"Q. Now, opposite that quarter of a pound then in the five cent column is put the figure 1?

"A. As I remember it, yes.

"Q. The quarter of a cent fraction is thrown away, disregarded?

"A. Yes, as I remember it.

"Q. As you came to six ounces what was the mark opposite six ounces in the five cent column?

"A. I don't remember the exact figures, I would not want to say, it has been such a long time since I examined that chart, I have not seen one of those charts of that scale in five years.

"Q. Will you calculate the value of six ounces at five cents a pound?

"A. It would be 6/16ths of 5.

"Q. And what would that be?

"A. 6/16ths of 5 is 30 divided by 16.

"Q. It is 1 14/16ths, is it not?

"A. Approximately, exactly I mean.

"Q. Approximately 1 14/16ths?

"A. 1.87.

"Mr. Meads: Are you working in decimals?

"A. Yes.

"Mr. Zane:

"Q. You have then a fraction of 14/16ths of a cent?

"A. Yes.

"Q. That's called a whole cent, is it not, because it is a half cent or more?

"A. That was the general scheme of that chart.

"Q. So that 2 cents would be opposite the 6 ounce indication in the 5 cent column?

"A. Logically I presume it would be, yes. I don't remember whether it was there or not.

"Q. I am asking you for the principle of the chart. You surely know enough about it to state the principle. Now, when you came to eight ounces in the 5 cent column what was the figure opposite 8 ounces?

1203 "A. It was 3 cents.

"Q. 5 cents multiplied into 8 ounces makes 2½ cents?

"A. Yes.

"Q. That 2½ cents was called 3 cents?

"A. Yes.

"Q. When you came to the 10 ounces what was your calculated figure there?

"A. I don't remember. It would be just simply calculated the same way I presume.

"Q. Well, calculate it out and tell me what the figure ought to have been there. 10 ounces, 10/16ths of 5 cents, it is 3——

"A. 3⅛ cents, I calculate everything in decimals.

"Q. 3 2/16ths of a cent?

"A. Yes.

"Q. That 2/16ths of a cent is disregarded and it is called 3 cents, is it not?

"A. It should be under that scheme.

"Q. Now, you say that the figure for the half pound, 2½ cents, became 3, and the figure for the 10 ounces, 3 2/16ths of a cent, became 3—are in the same row, same calculated row of 5 cents a pound and therefore that the chart is incorrect, that's what you mean, is it not?

"A. That's what I mean. Stated in another way, they cannot have two different weights of a certain money value at a certain price per pound.

"Q. But if you have a chart that is constructed on the principle of computing calculated values opposite specific weights and your prices per pound are low, you are bound to have duplications if your value figures are annexed to every 2 ounces; if you follow the rule of disregarding all fractions less than a half cent and calling all fractions of a half cent or more a full cent, you are bound to have duplications, are you not?

"A. Why, not necessarily, not necessarily.

"Q. Why not?

"A. Because—oh, if your chart is graduated so the smaller—yes, I think you would, I think you would have to have duplications.

"Q. Certainly. So your objection is to the principle of constructing a chart on the basis of putting calculated values opposite specific legal weights and using on those calculated values the rule of disregarding all fractions of a cent of less than a half cent and calling all fractions of a cent that amount to a half cent or more a full cent, your objection is to the principle of that?

1204

"A. It does not give the correct indication.

"Q. Well, your objection is to constructing a chart on that principle, is it not?

"A. Yes, because it does not give correct indications.

"Q. And it does not give correct indications because it disregards fractions?

"A. Yes.

"Q. You would not say that the chart was incorrect in the least respect if opposite those each two ounces you put in the exact calculation, put in the fraction of a cent, would you?

"A. Theoretically, it is not practical, you could not do it I don't believe.

"Q. Practically you could not do it, why?

"A. You would have too many small fractions in there.

"Q. And a second reason, is there not, can you carry out in our currency a transaction that involves a fraction of a cent?

"A. No.

"Q. Now, if you sold me a half pound of stuff at five cents a pound, I would have to pay either 2 cents or 3 cents for it, would I not?

"A. Yes.

"Q. I could not pay 2½ cents, could I?

"A. No.

"Q. Now, on the commercial rule you have got to dispose of that fraction of a cent some way, have you not?

"A. No, sir, for this reason, that that's not what you are doing on a computing scale.

"Q. Well, we will stick to the transaction. If you and I were dealing, you were a dealer and I came to you and bought a half pound of a certain kind of stuff at 5 cents a pound, what would you charge me for it?

"A. Why, I would charge you 3 cents and give you 3 cents worth of the stuff.

"Q. Well, 3 cents worth of the stuff at 5 cents a pound, could you weigh out on a scale, on any ordinary scale, a weighing scale that is divided into pounds and ounces—Suppose it were fine enough to have 16 ounce indications for each pound, could you weigh out to me 3/5ths of a pound?

"A. Not exactly, I could come closer than 2½ cents worth though.

"Q. Now, as a matter of fact in calculations of interest
1205 tables, take the Julian interest tables, in those calculations of interest you know that in those tables there are no fractions of a cent, don't you?

"A. No, there are no fractions of a cent in those tables.

"Q. You know that the fraction of a cent is disposed of in those tables under the commercial rule, don't you?

"A. True.

"Q. Yes, and so it is in almost all of the ordinary transactions of life where a half a cent is involved, that half cent is disposed of in the calculation one way or the other, is it not?

"A. Yes, where it can't be avoided.

"— Now then, if you were constructing a chart for an automatic computing scale and you wanted to put your value figures opposite each 2 ounces so that as your chart or drum holding the chart revolved and you wanted to bring in view on a horizontal line your value figures of the price per pound annexed to a weight of pounds and ounces recognized by law, when you had fractions, how would you dispose of them?

"A. I would not want to do that that way.

"Q. Suppose you were trying to do it, how would you dispose of the fraction?

"A. I would not do it.

"Q. Could not you dispose of the fractions under the commercial rule?

"A. No.

"Q. Why?

"A. Not on a device of that kind for selling ribbons or weighing or anything else.

"Q. I am assuming that you are trying to devise a chart where you give the values of weights at prices per pound, give the values in pounds and ounces at prices per pound, suppose you are trying to devise a chart of that kind, you are bound to have fractions, are you not, fractions of a cent?

"A. Yes.

"Q. Now, how would you in constructing a chart of that kind dispose of fractions of a cent if you didn't dispose of them by either disregarding them if they were less than half cent, or if they were a half cent or more, calling them a whole cent, how else would you do?

"A. I would not even attempt to do it because I don't believe it would be equitable, that has been disposed of any way, those charts are not used any more.

1206 "Mr. Zane: Move to strike out his statement.
"The Master: Motion sustained.

"Q. Now, you said that on this scale, on the Boston butcher's scale or Smith Scale, the effect was that with a weight on the platform the dealer might take two or more figures for that weight, is that what you meant to say?

"A. Might take two or more figures for a certain weight, yes.

"Q. For a certain weight?

"A. No, no. I explained that clearly I think, that, for instance, if you had 3 cents' worth, 3 cents would show when you had varying weights, in other words, any way from five cents value at two and one-half pounds up to a certain other quantity.

"Q. That only applies where you are weighing in cents' worth?

"A. Yes.

"Q. It does not apply when you are weighing in half pounds or quarters of a pound?

"A. No, it only applies when you are weighing in money's worth.

"Q. Now, coming back to the question, was it true what you stated in your direct examination, that the effect of this Boston scale was that with a weight on the platform the dealer might take two or more figures for that weight?

"A. The amounts are substantially the same.

"Q. Do you mean to say that?

"A. Yes.

"Q. If there is a half pound on the platform at five cents a pound?

"A. Surely.

"Q. Is there more than one figure?

"A. Only one figure shown.

"Q. The dealer could not take any other figure than that, could he?

"A. No.

"Q. If you had a half pound on the platform at 7 cents a pound, is there more than one figure?

"A. No, only one.

"Q. There is only one figure for that half pound in any column?
"A. Yes, that's true.

"Q. Then, is your statement true that the effect of the
1207 chart was with a weight on the platform the dealer might take two or more figures for that weight, you didn't mean to say that?

"A. Just the inverse of that's true. I don't know whether I made that statement just that way, I don't believe I made it.
"Q. If you made that statement, it is not true?
"A. I don't believe I made that statement.
"Q. If you made the statement, it was not true, was it?
"A. No.
"Q. Now, this morning when you were testifying you answered me that the positive, necessary elements of the nine that you have mentioned were the four, the counter force system, the supporting base, and the levers, the indicating mechanism and the mounting or support of the indicating mechanism. Now, suppose we take those four as the four things that are necessary in an automatic computing scale, how much of such a scale would you apportion to the counter force system?
"A. May I have that question read?

(Question read.)

"Q. Now, how among those four will you apportion the value of your scale?
"A. Taking one hundred per cent as the basis of a complete mechanism do you mean?
"Q. Yes, or taking one, just as you please, as the whole, how much would you give the counter force system?
"A. Give fifty to sixty per cent.
"Q. Which would you give, fifty or sixty?
"A. I would give sixty per cent, no, I would give it fifty per cent as a minimum.
"Q. How much would you give the supporting base and levers?
"A. Twenty-five per cent.
"Q. How much would you give the indicating mechanism?
"A. That is, I include in the base and the levers, of course, the whole supporting housing because that would be necessary, otherwise you would not have a complete scale.
"Q. Including the whole support?
"A. Yes.
"Q. You would give twenty-five per cent?
"A. As a minimum.
"Q. The supporting base and levers. How much would you give to the indicating mechanism?

1208 "A. Do you mean the indicating mechanism as itself or the form of the indicating mechanism?

"Q. You have stated the indicating mechanism as a whole as one of your elements. How much will you apportion to that element?

"Mr. Meads: We object. The witness has only stated as to the form of the particular mechanism.

"Mr. Zane: I don't care what he calls it.

"A. The indicating mechanism, including the reference marks and graduations on the chart and the formal mechanism, ten per cent.

"Q. And how much to the mounting support for the indicating mechanism?

"A. If you will pardon me, I will have to add to that other—better make that other, add also, make that minimum fifteen per cent and add the connection.

"Q. Indicating mechanism and connection?

"A. And motion translation device.

"Q. And connections also and call it now fifteen per cent. Now, how much for your mounting of the supporting of the indicator?

"A. Ten per cent.

"Q. That's the way you divide those absolutely necessary elements?

"A. If you only mention those four, yes.

"Q. Well, those four you say are all that are absolutely essential, that's what you said this morning, didn't you?

"A. No.

"Q. Very well, we will leave it that way with your denying that you said so this morning. Now, you say that this scale as it stands before you here you can divide into two parts, do you?

"A. No.

"Q. What?

"A. No.

"Q. You can't take that scale and divide it into two operating parts, can you?

"A. No, I cannot divide it into two operating parts.

"Q. If you take away any of the essential parts of that scale, it won't operate at all, will it?

"A. It don't make any difference——

"Q. The scale would not operate if you take away any one of the essential parts, will it?

"A. No machine would.

1209 "Q. Just answer about this scale.

"The Master: Just answer the question.

"A. If you take any one, remove any one of the essential parts, why it does not work.

"Mr. Zane:

"Q. It will not operate as a scale?

"A. As a scale.

"Q. It will not be either a weighing or a computing scale, will it?

"A. It won't be an operative scale.

"Q. Either weighing or computing?

"A. Either weighing or computing.

"Q. Yes. Now, answer the questions and we will get along faster. You said that you could take the top off of this scale and take off the indicator drum for the purpose of putting something in place of the indicator drum?

"A. Yes, sir.

"Q. Where would you take off the top?

"A. Take it off where I noted this morning, take it off here. (Indicating.)

"Q. Well, what part are you pointing to?

"A. My pencil is at the top above the housing that encloses the counter force system.

"Q. And on either side of the scale are two pipes going up, where would you divide those?

"A. I would cut those right off here at the top or down at the bottom, it would not make any difference.

"Q. It would not make any difference?

"A. I would not make any use of them, or else use those as a support of something else.

"Q. What is operated inside either of those pipes?

"A. There is a rack, or a rod with a rack on the end of it.

"Q. A rod and that rod is connected down below with what?

"A. A lever.

"Q. And the lever is the scale beam?

"A. The scale lever that supports the commodity platform.

"Q. Now, after you have divided that scale in this way and taken out that indicating mechanisms, taken off the housing of the indicating mechanism, you would have sticking out above your place where you cut off these pipes these rack bars?

"A. No.

1210 "Q. What would you do with the bars?

"A. I would bring that bar, as I explained this morning,——

"Q. We are not changing the scale, we are cutting the scale in two. After you got those pipes out you would expose inside of the pipe the rock bar, would you not?

"A. Yes.

"Q. Would you cut the rack bar?

"A. I would take the rack bar out.

"Q. Take it out?

"A. And close up the opening of course.

"Q. Now then, the question, after you have cut that scale apart in that way, would be as to whether you could adapt something else there, is a purely mechanical question, is it not?

"A. Purely.

"Q. Purely a mechanical question?

"A. Yes, sir.

"Q. After you had got this scale cut apart in that way your scale would not be a scale at all, would it?

"A. After you cut it apart?

"Q. Yes.

"A. And before you substitute any thing on it?

"Q. Yes.

"A. Certainly not. You would have your essential parts of a scale, but it would not be a scale.

"Q. You would not have any indicating mechanism because you have thrown that away?

"A. I thought you meant when I just cut it apart.

"Q. If you cut it apart, you would have a scale divided into two parts?

"A. Yes.

"Q. Neither of which would operate?

"A. Neither of which would operate.

"Q. Did you ever in your life try to make a scale by taking a scale of this kind and trying to put on it a fan shaped dial for an indicating mechanism, did you ever do that?

"A. Take a scale of that kind and put another—no, I did not.

"Q. Did you ever try to put on a scale of this kind a frustrum of a cone for an indicating mechanism?

"A. I personally never tried putting one on that scale.

"Q. On that kind of a scale?

1211 "A. No, never.

"Q. On any kind of a scale?

"A. Yes, but not a computing scale.

"Q. What kind of a scale was it?

"A. It was just an experimental scale I was working on.

"Q. What kind of a scale?

"A. A platform and beam scale.

"Q. You were trying to fit to a platform and beam scale the frustrum of a cone?

"A. Not a frustrum of a cone, a disc.

"Q. I asked you a frustrum of a cone.

"A. Pardon me, I thought you said a disc; a frustrum of a cone, no.

"Q. You never tried to fit a frustrum of a cone to any kind of a scale?

"A. No, sir.

"Q. Did you ever try to fit to a scale of this character, that is, a cylinder automatic computing scale, a disc for an indicating mechanism?

"A. No, sir, I did not.

"Q. Did you ever try to fit a scale of this character any kind of an indicating mechanism?

"A. No. You mean doing the mechanical work of fitting it?

"Q. Or trying to direct somebody to do it?

"A. No.

"Q. Now, the scale of this character which we have been talking about is this gold scale here which is called Exhibit 55, is it?

"A. I have assumed it, I have not looked at the number, I assume it is.

"Q. Well, you had better see that it is Defendant's Exhibit 55.

"A. Yes, I see that.

"Q. That's this scale you have been talking about, is it?

"A. Yes.

"Q. Now, we will take your fan shaped scale. When you fastened onto that mechanism there your fan shaped chart how did you fasten it, what would be your connections?

"A. I judge from that question you want me to describe how I would attach it to that particular scale?

"Q. Yes, Exhibit 55.

1212 "Mr. Meads: He has not testified as to a fan shaped scale. He testified to the two forms of dials.

"Mr. Zane: He said a fan shaped chart.

"Q. Now, try and fasten on there a fan shaped chart.

"A. All you would need to do would be to connect an indicator to the cam which moves the pendulum and that indicator would move somewhere through the pendulum bob and move it back and forth over the chart.

"Q. Now, you would mount that chart and so on where you would cut that bar off?

"A. Yes, sir.

"Q. What's the capacity of that chart?

"A. Thirty pounds.

"Q. What?

"A. Thirty pounds.

"Q. How would you make your ten pound chart do service on that scale?

"A. Ten pound chart?

"Q. Yes, your fan shaped chart you talk about is a ten pound chart.

"A. I can make a thirty pound chart, a fan.

"Q. A thirty pound fan and you would put it on there?

"A. Certainly.

"Q. Through those connections you speak of?

"A. Yes.

"Q. Did you ever see that kind of a scale?

"A. No, I have never seen a thirty pound fan scale.

"Q. You never saw a thirty pound fan scale in your life, did you?

"A. Let's see, I believe I did. Is not the Triner a fan shaped scale that runs up to thirty pounds, yes, yes.

"Q. Without any duplications, without any multiplying in it?

"A. It is not a computing scale, it is an indicating scale.

"Q. Did you ever see a fan shaped computing scale of a thirty pound capacity without any adjustment?

"A. On a fan?

"Q. Yes.

"A. No, sir.

"Q. And you never saw anybody or any scale where anybody had attempted to mount upon this kind of a mechanism, eliminating the cylinder and the housing, a fan shaped chart, you never saw such a thing in your life, did you?

1213 "A. On this particular scale, no.

"Q. This kind of a scale?

"A. You mean a pendulum scale?

"Q. No, a scale that is made transmitting through connections upward to the indicating device such as you see before you?

"A. Never on a scale just like that, no.

"Q. Well, now, on a scale how close to this?
"A. Do you refer to the principle or do you mean a scale like this one?
"Q. No, made like this.
"A. Made like this, no.
"Q. Or in any imitation of this form of scale?
"A. Not in any imitation of it.
"Q. The only fan shaped scales you have seen are fan shaped scales of the ordinary variety such as you have described as the Toledo fan shaped scale or the Fairbank fan shaped scale or the Stimpson fan shaped scale or something of that kind?
"A. But the Toledo fan shaped scale is entirely different from the Stimpson or the Fairbanks fan shaped scale because they are platform scales with a lever system altogether different, so far as the fan is concerned they are the same.
"Q. You stated this morning that the general appearance of the Stimpson-Fairbanks fan shaped scale was the same as the Toledo fan.
"A. No, I don't think so.
"Q. You don't?
"A. No, I don't think so. I stated that the fan was similar in appearance.
"Q. Now, let us go to the frustrum of a cone which you said could be mounted upon this mechanism with the indicator cut off. You said that you had seen a scale with a cone shaped chart and I asked you what was the name of the scale and your counsel interrupted you. Has he said anything to you about that since?
"A. No.
"Q. Very well, what was the name of the scale?
"A. The Angldile scale.
"Q. Where was that scale made?
"A. That was made somewhere in Indiana I think.
"Q. By the Angldile Company?
"A. By the Angldile Company.
"Q. Of course, that was a patented scale?
1214 "A. I assume that it was, I don't know from personal knowledge that it was patented.
"Q. And you assumed that the company could obviate the stealing of this drum patent by stealing the Angldile Company patent, sir, did you?

"Mr. Meads: I object to the form of the question.
"The Master: Objection sustained.

"Mr. Zane:

"Q. Now, tell us how you would proceed to mount the Angldile frustrum of a cone on this truncated scale of yours after you had cut off the indicator drum and the housing?

Mr. Meads: Object to the form of the question. The witness never said he would proceed to mount the Angldile form of a cone on this truncated scale.

"The Master: Objection overruled. Do you understand the question?

"A. The question is how could the frustrum of a cone be mounted on that scale, is that the question?

"Mr. Zane:

"Q. You mean the frustrum of a cone like the Angldile cone, didn't you?

"A. Yes, *or* course. The frustrum of a cone could be very easily mounted in that housing by shifting one of the bearings or mountings of the cylinder forward or backwards so that the axis would be displaced at an angle so as to bring the edge of the cone parallel to the front face of the indicating scale.

"Q. The axis of the cone then would not stand horizontal but would be diagonal?

"A. No, the axis would still be horizontal.

"Q. The axis of the cone?

"A. The axis of the cone would still be horizontal, but would be displaced in a horizontal plane to what it is at present.

"Q. How could you make your connection between your rack bar and your cone?

"A. Make the connection on one end of the cone by having the rack engage in the pinion at the end of the spindle of the cone.

"Q. Now, if I understand you, you would have the smaller end of your cone at one side of the scale and the larger end of the cone at the other side of the scale?

"A. Yes, sir.

"Q. You would have the axis running through the center of the cone or the central line of the cone?

1215 "A. Yes, sir.

"Q. You would have that horizontal?

"A. Yes, sir.

"Q. You would change this mechanism so as to give space for the cone to revolve, would you?

"A. No, the outside would not have to be any bigger than the inside of that cylinder, the large end.

"Q. No larger than the large end of that cylinder?

"A. That's all. May I point out? Of course, one bearing would be in the center of this end, say, if this was the large end. Of course, preferably the large one would be on this side, (indicating) but if this was the large end, the other end would come over there and be placed to one side.

"Q. Which end would you have for the right end?

"A. I would have the large end over there.

"Q. You would have the large end of the cone to the right of the scale?

"A. Yes.

"Q. And the smaller end of the cone to the left of the scale?

"A. To the left.

"Q. Where would you operate the cone, from which end, the smaller or the larger end?
"A. From the larger end.
"Q. How would you do it, by a rack and pinion?
"A. By a rack and pinion.
"Q. Now, you woud read the scale from the front or dealer's side of the scale?
"A. Yes, sir.
"Q. Where would be your weight indications?
"A. Have to be out to the large end of the cone.
"Q. You would put them on the large end of the cone?
"A. At one side.
"Q. And you would have your weight indications exposed on the other side?
"A. Yes, sir.
"Q. At the side of the housing enclosing the cone?
"A. Yes, sir.
"Q. How would you have your slot through which you read the scale, just like it is there, have it horizontal?
"A. Yes, sir.
"Q. As it is here?
"A. Yes, sir.
"Q. Do you know how the Angldile cone is mounted?
1216 "A. Yes, sir.
"Q. On the scale?
"A. Yes, sir.
"Q. It is not mounted in that kind of a mechanism at all?
"A. Oh, no, no, it is not mounted on that kind of a mechanism and the figures are running the wrong way for this. You would have to change the figures on the periphery of it.
"Q. Do you recognize the picture I show you——
"A. Yes, sir.
"Q. —as a picture of the cone scale we are talking about?
"A. Yes.
"Q. In reading that scale the dealer stands above it and looks down on it, does he not?
"A. Yes, sir.
"Q. And the opening for the reading at the large end of the cone is much larger than the small end, is it not?
"A. Yes.
"Q. Answer the question.
"A. I said yes.
"Q. Now, when you had on the scale you are constructing a cone arranged in that way would you have your slot the same width all the way across?
"A. Yes.
"Q. So at the larger end of the cone the slot would expose a much smaller relative portion of the circumference of the cone than it would expose at the smaller end of the cone?
"A. Certainly.

"Q. Now, you would have then your larger value figures out toward the larger end of the cone?

"A. Yes.

"Q. And your smaller value figures at the smaller end of the cone?

"A. Yes, sir.

"Q. Have you speculated on how you would get your figures on at the smaller end of the cone?

"A. There is no question but what they could be put on.

"Q. They could be put on at the smaller end of the cone?

"A. Certainly.

"Q. Now, on your cone how would you have your value figures put on, at right angles to the axis of the cone?

"A. At right angles to the axis of the cone, yes, certainly.

"Q. Well, then, as the dealer stood and looked at the
1217 figures he would see the figures up and down, would he not, the vertical figures?

"A. Certainly.

"Q. He would not look at it with his eye in the same plane as the vertical figures?

"A. He would see the figures just the same as they are.

"Q. But the figures would be at right angles to the axis of the cone?

"A. I don't exactly know what you mean by the figures at right angles to the cone.

"Q. Don't you?

"A. You would have to change those figures around a good many degrees.

"Q. You would then on this cone chart of yours change the figures around?

"A. Certainly, because this is supposed to be read vertically like this instead of like that.

"Q. You would change your figures on that chart around?

"A. Yes. In the Angldile the figures are placed substantially parallel to the axis of the cone and they have to be placed at right angles.

"Q. Now, this slot of yours, have you figured how much of the weight graduate at the smaller end of the cone would be exposed when it exposed the same horizontal distance at the larger end of the cone?

"A. I stated that I would put the weight graduations down on the larger end of the cone.

"Q. Yes.

"A. Now your question is how much of this will be exposed relative to that?

"Q. Yes.

"A. It would simply depend on what the angle of the cone is. If you make the cone, as I stated this morning or maybe yesterday afternoon, if you make the cone so you have to move the support ⅜ths of an inch, you would have a cone with a very sharp angle,

perhaps a three or four degree cone, so your angle or change in the amount of divisions shown would be not over the three degrees.

"Q. That is to say, your cone at the larger end would be how many times larger than the cone at the smaller end?

"A. I should say perhaps roughly about 1¼ times.

"Q. Are you measuring in diameter or in circumference?

"A. In diameter. It would not make any difference.

1218 "Q. 1¼ times greater diameter at the larger end than at the smaller end?

"A. Yes.

"Q. You mean by that I suppose that if the diameter of the cone was at its smaller end one inch we will say for purposes of comparison, the diameter at the larger end would be one and one-quarter inch?

"A. Yes.

"Q. That would be the kind of a cone you would have?

"A. Yes, or it could be even two to one.

"Q. How many more value figures at 30 cents a pound do you have to get in than value figures at 4 cents a pound?

"A. How many more value figures at how many cents a pound?

"Q. 30 cents.

"A. Than at what?

"Q. 4 cents a pound.

"A. Why, it would be the proportion of 30 to 4.

"Q. Yes. Over seven times more figures?

"A. Yes.

"Q. Have you speculated on how you would get those figures on the cone at its smaller end?

"A. Why, it would be simply no speculation, it would be simply a question of having them closer together than the other end.

"Q. Would you reduce the size of your figures, that is, would you have larger figures at the small end of the cone than at the larger end of the cone?

"A. The figures would be the same size but the spacing would be different.

"Q. You would put them closer together?

"A. Closer of course at the larger end than at the smaller end because there are more values.

"Q. And with the cone 1¼ times larger, that is, a quarter more of diameter, you would have no difficulty you think in getting your 30 value figures in the space of a pound?

"A. None whatever.

"Q. As you look at that scale tell me what would be the diameter of your cone at its larger end, what size cone would you put in there?

"A. Approximately eight inches.

"Q. Eight inches at the larger end?

"A. It would depend, if I used that housing, as to what

1219 would go in the housing, it would be substantially about eight inches.

"Q. Eight inches in diameter. That would make your circumference at the larger end of your cone how much?

"A. A little over 24 inches.

"Q. Now, for thirty pounds at a value of 30 cents a pound how many value figures would you have to have around that larger circumference?

"A. It would depend upon where I was going to send the scale and if I had to put one cent graduations, you would have 30 times 30; if you put two cent graduations——

"Q. Well, assume you are wanting to indicate each cent on that by a figure, then you would have 900 value figures around the larger end of the cone. Have you speculated what would be your division of that 24 inches of space that you have got to put 900 figures into?

"A. There is no difficulty in that.

"Q. You don't see any difficulty in that?

"A. Absolutely none, not at all, a purely mechanical proposition and a question of magnification.

"Q. Now, I wish you would describe the cone condition you would have in that scale, describe its length, would it be the length to fit this scale?

"A. If I was going to fit on that housing, I would certainly divide it so as to fit it on that housing, that's simply a matter of design.

"Q. Well, you would have it the same width as the drum that is now on the scale?

"A. Yes, sir. That is, you mean the length of it?

"Q. Width of the scale and the length of the drum.

"A. Yes.

"Q. You would have the cone certainly at one end, the larger end, eight inches in diameter, what would you have it at the other end?

"A. Well, it would be anywhere from four inches to probably five inches.

"Q. One and one-quarter times as large at one end?

"A. It might be two.

"Q. We are asking you what it would be.

"A. If I were designing it, I would make it four inches or five.

"Q. Four inches or five inches in diameter at one end and eight at the other?

"A. Yes.

1220 "Q. You would have your connections by means of rack and pinion?

"A. Yes.

"Q. What would you have your drum made of, the material?

"A. Why, that would be immaterial, I would probably have some paper or cel-uloid on the outside or I might cast it out of plaster of paris with hollows in it and I might have any kind of material in there that substantially would not be affected by humidity or atmospheric conditions, that's the prime importance.

"Q. Could you have it as light as that cylinder that's in the scale now?

"A. I personally would not because I think that's as a rule too frail.

"Q. You would have a heavier cone cylinder?

"A. Yes, sir.

"Q. But you would not have it as heavy as to interfere with the sensitiveness of the scale?

"A. The weight has nothing to do with that, only the perfection of the bearing.

"Q. You think the weight of the drum has nothing to do with the scale, is that what you think?

"A. Yes, I know it has something to do with the inertia of the drum.

"Q. Then you think if the Court of Appeals has decided in this case that the first drum ever put on a scale that would operate correctly was necessarily a light drum and operated correctly because it is a light drum, that the Court of Appeals is mistaken?

"Mr. Meads: I object.

"The Master: Objection sustained.

"Mr. Zane:

"Q. So you don't think that the weight of the drum has anything to do with the correctness and sensitiveness of the scale?

"A. Why, it does not necessarily have to be light, no. I think it is a secondary matter. As I said this morning, there is a question of perfection of the mounting of the drum.

"Q. The centrifugal force of the movement of the drum has nothing to do with it?

"A. No, the centrifugal force has not.

"Q. Either arising from the lightness or heaviness of the drum?

1221 "A. The centrifugal force does not enter into it at all. The connection wants to be heavy enough to take care of the inertia, that's all.

"Q. That's your idea of the situation of this scale?

"A. Yes.

"Q. Did you ever build or try to build a cylinder scale in your life?

"A. No.

"Q. Have you considered what would be the weight of your drum?

"A. The amount of weight, I would not be so much concerned about it.

"Q. What would be your permissible limit for weight of drum?

"A. Probably in the neighborhood of I should say three or four pounds.

"Q. Three or four pounds of drum?

"A. Simply for convenience in handling it.

"Q. Have you ever tried to imagine whether an operating drum of the kind you describe with a variation in the diameter in either end would be an infringement of the drum cylinder patent?

"A. I don't think so, in the end.

"Q. You never considered that at all?

"A. I was not called upon to consider anything like that.

"Q. No. I suppose that was not drawn to your attention. Did you ever see any other kind of a cone cylinder automatic scale than this Anglidile scale?

"A. No, I never did.

"Q. That's the only one you ever saw.

"A. The only one I ever saw.

"Q. And so far as you know that was a patented scale?

"A. I don't know whether it was or not, I stated this morning that I didn't know.

"Q. Do you know whether it is being made and sold now?

"A. Whether it is being made at the present time, I do not know, but I know it was being sold two years ago. As to whether it is being made now and sold I don't know.

"Q. Now, did you notice that this Anglidile scale with the cone cylinder cannot go up to 30 pounds capacity without a tare poise put on it?

"A. I don't see any reason why it could not.

"Q. Have you looked at this scale to see? (Showing witness figure of scale.)

1222 "A. That particular scale it does not, but I don't see any particular reason why it could not.

"Q. That particular scale is 20 pound capacity and 10 pound tare on it.

"A. Yes.

"Q. In this scale outside of the larger end of the cone is a revolving hand which indicates the weight.

"A. In the customer's side.

"Q. That's for the customer?

"A. Yes.

"Q. That faces the customer?

"A. Yes, sir.

"Q. Is this Anglidile scale a pendulum scale?

"A. The Anglidile scale is a spring scale.

"Q. Has it a dash-pot?

"A. It has.

"Q. Has it a shock absorbing apparatus?

"A. It has.

"Q. It has a counter force system?

"A. Yes, it has.

"Q. Now, these ideas of yours of putting a dial, or rather, a fan chart on a cylinder scale or putting a cone chart on a cylinder scale, have you ever suggested either of those ideas to a scale maker?

"A. I have not.

"Q. Now, we will go to your dial. You said you could moult a dial on this scale after you had taken of the indicating device?

"A. Yes.

"Q. Would that be a scale with a circular dial?

"A. Circular dial, the dial being the moving part.

"Q. With the dial revolving?

"A. Yes.

"Q. Over a fixed point, fixed indicator?

"A. Yes.

"Q. And when the scale had nothing upon it the indicator would point to zero on the scale?

"A. Yes.

"Q. Now, what would be your form of connection for the revolving dial?

"A. On that particular scale? (Indicating Exhibit 55.)

"Q. This is the one you are dismembering.

"A. The connection between the dial would be simply by
1223 the rack rod passing from the load lever up to the pinion on the revolving dial.

"Q. Would you have the dial stand in the same plane as the lower housing?

"A. Yes, sir, I would have the face of the dial in the same plane as the axis of that cone now, or the axis of the revolving dial at right angles to the axis of the cone now.

"Q. Well, which would you have?

"A. Those both mean the same thing.

"Q. Would you have the dial stand in the plane of the scale in the direction of the scale lever or would you have the dial stand in the direction of the axis of the cylinder?

"A. The direction of the axis of the cylinder like this so it could be seen by the dealer and customer.

"Q. How would you revolve your dial, what would be your connection?

"A. My connection would be a rack from the platform lever to the pinion on the axis of the dial.

"Q. Give me the different parts of that connection.

"A. A pinion mounted on the axis of the revolving dial engaging into that pinion, a rack attached to a rod which in turn is attached to the main load lever of the scale.

"Q. Would your rod be vertical?

"A. No, sir, it would be inclined.

"Q. Inclined towards the center of the scale?

"A. Yes, sir, at the upper end.

"Q. Would your rack be vertical?

"A. No, sir.

"Q. How would that be inclined?

"A. Inclined toward the center at the upper end.

"Q. Toward the center of the scale?

"A. It could be made vertical just as well by bending the rack rod, but it would not make any difference.

"Q. Would the rack teeth engage your pinion on the side or on the top of the pinion or at some other place than the side or the top of the pinion?

"A. It would be on the side, but not on the horizontal side of it.

"Q. It would be somewhere between the top of the pinion and the side of the pinion?

"A. Yes.

"Q. What would your disc be made of?

"A. I would make the disc of almost any material,
1224 enameled sheet steel or brass or aluminum or any metal I could make rigid enough. The thickness of it would depend

upon whether I wanted a computing chart on the customer's side as well as on the other side.

"Q. What would be the material of the chart itself?

"A. The material of the chart itself?

"Q. Yes.

"A. I would make that material, the material could either be some white composition on the chart or it could be paper or cel-uloid, glued or placed on the disc of the chart.

"Q. What would you consider to be the weight of your disc?

"A. I would say that that would be in the neighborhood of probably a pound or a pound and a half or two pounds or something like that.

"Q. Did you ever see a disc of the kind you speak of mounted on a scale like Exhibit 55?

"A. No.

"Q. Have you ever made the suggestion to anybody as to making a scale of the character such as you have described?

"A. Why, I have often talked about it, but I don't know as I have ever suggested it to any scale manufacturer, I could not say whether I have ever suggested it to a scale manufacturer or not.

"Q. Now, you say that in the construction of this dial that you are speaking about you would have a moving dial?

"A. Yes.

"Q. You would not have a moving index across the dial?

"A. You could have that, that would be another construction, either one.

"Q. Would that be feasible?

"I think so, absolutely no question about it.

"Q. Have you ever seen a computing scale of that character where there was a moving hand across the dial making substantially a complete revolution?

"A. No price computing unless you take into consideration the post office zone scales which are essential in principle with computing scales.

"Q. What kind of a scale are you talking about?

"A. The scales like the Shattelan people make for rating the postage due on parcel post from certain zones. It is not a price computing scale for a retail dealer in selling out commodities.

1225 "Q. Are you talking about a post office scale?

"A. Yes.

"Q. And it has no indication of weight on it, has it?

"A. Oh, yes.

"Q. Or has it?

"A. Oh, yes.

"Q. And it has a revolving dial?

"A. No. A revolving pointer you asked?

"Q. An index revolving over the dial. Is it a hanging scale?

"A. No, it is a platform.

"Q. A counter platform scale used in the post office?

"A. No, I don't think it is used in the post office.

"Q. Where have you seen that being used commercially?

"A. A number of places around New York I have seen it.

"Q. What kind of dealers?

"A. Why, ordinary commercial houses, not for the purpose of selling commodities, for estimating postage for packages.

"Q. For any other purpose have you seen it used?

"A. No.

"Q. What are the markings?

"A. The markings are on the pound and ounce values on the outside ring and the value of postage for different zones on radial circles.

"Q. Have you seen any other kind of a scale than that?

"A. No, sir.

"Q. That's the only kind?

"A. Yes.

"Q. That's the Shattelan scale?

"A. Yes.

"Q. Was the other scale you spoke of of the same kind—Forschner?

"A. No, I have not seen any of Forschner's that are postal scales. There was a revolving disc computing scale, hanging scale of Shattelan.

"Q. Yes, revolving hanging disc computing scale.

"A. But you asked me about the revolving portion of the Shattelan.

"A. Is the Shattelan a revolving disc or revolving pointer?

"A. It is a revolving disc.

"Q. The Forschner scale is a hanging scale?

1226 "A. A hanging scale.

"Q. Is that a revolving disc or revolving pointer?

"A. Revolving disc.

"Q. Do you know whether those scales are patented scales?

"A. I have not the slightest idea.

"Q. Now, this scale, Exhibit 55, you said that you referred from 50 to 75 per cent of its value to the counter force system didn't you?

"A. Yes.

"Q. Now, how much of that value do you want to actually apportion to the counter force system, 50 or 75 per cent or something between?

"A. I don't know whether I can make it any closer than that, 50 or 75 per cent, about 50.

"Q. Cannot make it any closer than 50 to 75 per cent, is that what you mean?

"A. Call it as a minimum 50, if that's what you desire.

"Q. It is not what I desire, it is what you want to swear to.

"A. That is at least 50 per cent of its value.

"Q. Minimum value?

"A. 50 per cent.

"Q. Now, in judging of that value did you take into consideration whether or not any portion of the scale was a monopoly belonging to somebody?

"A. I did not.

"Q. Now, for the lever system you have a value of 25 to 33⅓ per cent. 25 per cent is your figure for that, is it?

"A. Yes.

"Q. Your next item is the connection between the counter force system and the indicating mechanism, you put that at a minimum of two per cent, did you?

"A. Yes.

"Q. Your next item is the dash-pot, what is the minimum of that?

"A. I would place the minimum of that at five per cent, that's certainly one-twentieth of the value of the scale.

"Q. Your next item was the shock absorber, at two per cent, was it?

"A. Yes, sir. That is, I don't know whether that's the next item, but that's substantially what I should put it at.

"Q. The next item was the mounting of the indicating de-
1227 vice at five per cent, that's correct, is it, five per cent is your minimum?

"A. That's certainly the minimum.

"Q. Now, what amount did you give to the leveling device for the platform, what's your minimum?

"A. Why, I should place that at, certainly at about five per cent minimum.

"Q. Now, your indicating device as a whole, what is the minimum that you assign to that?

"A. The particular indicating device as a whole would be five per cent.

"Q. The whole indicating device five per cent?

"A. Yes.

"Q. So that you figure the dash-pot as of the same value as the indicating device?

"A. Yes, I do in my analysis of an indicating scale whether it is a computing indicating scale or the other kind of a scale.

"Q. And you figure the levels for the platform, these spirit levels, as of the same value as the indicating device?

"A. Yes, sir.

"Q. Now, you divided your indicator into parts, you assigned two per cent to the form, two to the indications on the indicator and two per cent to facility in reading as to dealer and customer, making six in all which you called five, is that what you mean to say?

"A. Making it two and two and two would make it six. I am not confining myself so closely to those percentages, they may vary either way.

"Q. So you would change that to six per cent?

"A. Yes, sir.

"Q. Now, those are your divisions of this scale regarded from the mechanical standpoint you say, what do you mean by that?

"A. Purely in the abstract as an instrument, the relative importance of the different parts of an instrument.

"Q. Supposing you have a watch, would you undertake to divide that up in the same way?

"A. I think that can be divided up in the same way.

"Q. Well, now, if you took a watch, would you undertake to say how much of the value was referable to the dial?

"A. Yes, I would attempt that.

1228 "Q. How much would you say of the value of the watch was referable to the dial?

"A. Certainly not over about two per cent.

"Q. What do you say your next part of the watch would be?

"A. To the balance wheel I would give eighty per cent.

"Q. Eighty per cent to the balance wheel?

"A. Yes, sir.

"Q. What else?

"A. I would give about seventy-five per cent to the balance wheel or eighty per cent, and then perhaps ten or fifteen per cent or twenty per cent to the accuracy of the gears.

"Q. You mean the engaging gears?

"A. Yes, the mechanism.

"Q. All of them in the watch?

"A. Yes.

"Q. All the wheels in the watch?

"A. Yes, because essentially the balance wheel is the most important part of it.

"Q. How much would you give to the wheels in the watch, twenty per cent?

"A. Twenty to twenty-five per cent.

"Q. What else?

"A. And then you have got the supporting frame.

"Q. The outside parts?

"A. No, not that.

"Q. Just the inside frame?

"A. The inside frame.

"Q. Yes.

"A. And then take the watch as a whole I would give the case perhaps three or four per cent.

"Q. How much would you give the inside support?

"A. About five per cent.

"Q. Now, is not there anything left?

"A. I don't believe there is anything left.

"Q. How about the stem winder?

"A. I would not give that over half a point.

"Q. Half of one per cent for the stem winder. What value would you give the casing of the watch?

"A. About five per cent.

"Q. Whether it is an Ingersoll or a gold casing?

"A. Yes, as a mechanical apparatus it does not make any

1229 difference whether you have got a gold case or a sheet iron one.

"Q. Now, going to your other set of values, your other set of division was from the economic standpoint?

"A. Yes.

"Q. What's your distinction between mechanical standpoint and

economical standpoint? What do you say as the difference between the two things?

"A. Simply considering it as a machine, mechanically it would be the mechanical standpoint, and its economic standpoint, would be its utility as a machine; in a computing scale would be its utility in serving the purpose of weighing the merchandise over the counter, its effect on the customer as well as on the dealer.

"Q. Well, then, you say that the mechanical standpoint is the standpoint of regarding it as a machine?

"A. Simply as a machine as such.

"Q. And what is your basis of division of this value among different parts of a machine as a machine from the mechanical standpoint, what's your basis of division?

"A. From the mechanical standpoint?

"Q. Yes.

"A. From the mechanical standpoint it's simply as to the relative value of the parts, taking the scale as a whole, and one hundred per cent, what I would say the interrelation of the different parts and their relative importance to produce that one hundred per cent.

"Q. Is your basis then wholly relative importance in producing a given mechanical result?

"A. Yes.

"Q. Do you mean by that the importance of each part in contributing to the working of a machine as a machine?

"A. As a whole, yes, sir.

"Q. So that you think that you can divide a scale between the different parts of it and say, where each part that you speak of is necessary to its operation as a machine and where if you leave out either one of those parts, it won't operate as a machine, that fifty per cent of its operation as a machine is due to one thing and twenty-five per cent of it is due to another thing and five per cent of it is due to another thing, all of which things are necessary to it as a machine?

"A. Yes, sir, do that with any kind of a mechanical device.

1230 "Q. You can do that with any kind of a mechanical device?

"A. Any good mechanical engineer can. When any man is designing an instrument the thing he first centers his attention on is what is the most important thing of this thing as a whole and he forgets the rest of it until he gets to it.

"Q. Well, take an ordinary ax which consists of the handle and the steel part of the ax, how much of its value as a machine would you refer to the ax head and how much would you refer to the handle?

"A. Why, you can probably assign easily fifty per cent to the weight of the ax head and probably twenty per cent or twenty-five per cent roughly to the edge of the ax and twenty-five per cent to the handle; if you had the same ax without any weight you would not have an ax, and if you had the same ax with an edge and if you didn't have a handle on it you would not have an ax. I think that would be a very clear illustration.

"Q. Twenty-five per cent to the ax head irrespective of material, twenty-five per cent to the fact that it is material that takes an edge, fifty per cent to the handle?

"A. No, I said fifty per cent to the weight of the ax head, twenty-five per cent to the ax and to the material that takes the edge and twenty-five per cent to the handle.

"Q. Well, would your same proportions hold good in regard to a hammer?

"A. Yes, substantially the same proportions.

"Q. What is the value of the edge of the hammer?

"A. The head of it?

"Q. The edge.

"A. That corresponds to the head of the hammer.

"Q. What are your proportions in a hammer?

"A. I would say twenty-five per cent to the temper of the head of the hammer, fifty per cent to the weight of the hammer and ordinarily twenty-five per cent to the handle.

"Q. Supposing now it were a tack hammer, how would you divide that up?

"A. Substantially the same thing, only on that you would probably have a claw on it to take tacks out.

"Q. How much would you refer to the claw?

"A. That would probably take away five per cent from the edge of the hammer or the face of the hammer.

1231 "Q. Now, any machine can be divided up in that way?

"A. Yes, I personally think it can.

"Q. Take a locomotive engine?

"A. Yes.

"Q. How much would you assign to the different parts there?

"A. You get into a pretty complicated proposition there. I don't think you can adjourn today if you want to assign the different values to a locomotive and I don't want to attempt that unless you give me a drawing.

"Q. Divide it into the larger parts. How much would you refer to the pilot of the engine?

"Mr. Meads: I think I will have to object.

"The Master: Objection overruled.

"A. Roughly speaking a locomotive can be divided into boiler, fire box, wheels and driving mechanism.

"Q. That's cylinders, pistons—

"A. Yes, cylinders, pistons, leave out of consideration the tender.

"Q. Well, take in the tender.

"A. All right, take in the tender.

"Q. Sometimes the tender is built solid on the locomotive as in these prehistoric locomotives on the Illinois Central, take in the tender. Now, have you the particular parts that you want?

"A. Yes.

"Q. Does the cab fulfill any useful purpose?

"A. Yes, that's a part of the driving mechanism?

"Q. Put the cab there. What about the extension fire box?

"A. I mentioned fire box as a whole, everything connected with the fire box.

"Q. Well, where do you put the spark arrestor, where do you put that in your parts, the spark arrestor?

"A. I think that's of very small importance.

"Q. Spark arrestor of small importance?

"A. Yes, of very small importance I think as a whole.

"Q. Very well. Let's begin to divide up the value of this locomotive of yours. How much do you assign to the boiler?

"A. Fifty per cent.

1232 "Q. How much to the cylinders and piston and cab and everything else connected with the driving part?

"A. Twenty-five per cent.

"Q. How much to the tender?

"A. Ten per cent and fifteen per cent for the rest.

"Q. Well, how much for the spark arrestor?

"A. I would not assign anything particularly to that.

"Q. Nothing at all for that?

"A. No.

"Q. The pilot, would you separate that?

"A. No.

"Q. No value?

"A. No, I would not separate them.

"Q. Would not attempt to separate that. Now, any other machine you can divide the same way?

"A. I don't say I can divide any other machine that way. I say any other machine can be divided that way. I would not say that that locomotive would stand that division because I am not an expert locomotive engineer. I do happen to know something about scales and something about watches.

"Q. But how do you know that a locomotive engine can be divided by an expert on that basis if you don't know anything about locomotives?

"A. I did not say that I don't know anything about a locomotive.

"Q. If you don't know anything about the relative efficiency of the parts, how do you divide it?

"A. I have a notion of the relative efficiency of the parts, but I have not kept up in the details of locomotive designing.

"Q. How do you know how an expert will divide it if you don't know what an expert would say about it, you say you are not one?

"A. No.

"Q. And yet you say you can tell how an expert would divide it?

"A. I did not make that statement.

"Q. How do you make that out?

"A. I did not make that statement.

"Q. Now, is the division you have given of the locomotive an expert division?

"A. No, sir.

"Q. Just your division?

1233 "A. Yes, sir.

"Q. You don't say an expert would have divided it that way?

"A. No, sir, I did not state that.

"Q. Well now, let's go to your economic division. Is a part of that economic division the usefulness of the parts in selling it?

"A. That may enter in as part of the economic value of it.

"Q. Does it enter in your division?

"A. In my division it did not because I considered simply the dealer's standpoint, what he thought of the scale from my experience with dealers in weights and measures matters.

"Q. You were considering it from the standpoint of the purchaser of the scale?

"A. And the consumer who bought over the scale.

"Q. Some person other than the owner of the scale?

"A. Yes.

"Q. Solely from that standpoint and not from the manufacturer's standpoint of selling scales?

"A. Not as a selling proposition.

"Q. What?

"A. Not as a selling proposition.

"Q. Now, your division there is, from an economic standpoint what is your percentage for the counter force system?

"A. I should say fifty per cent.

"Q. What is your amount for the lever system?

"A. I should say twenty-five per cent.

"Q. What is your amount for the connection between the counter force and the indicating system?

"A. Say two per cent.

"Q. What is your amount for the dash-pot?

"A. Say five per cent.

"Q. What is your amount for the shock absorber?

"A. I would put the dash-pot and the shock absorber together as five per cent, the two coupled together, because the consumer and the dealer are usually not considering those parts except as a matter of permanency and of freedom from vibration.

"Mr. Zane: Move to strike out all the rest of his answer as not responsive after 'because.'

(Question and answer read.)

1234 "Move to strike out everything after 'because.'

"The Master: Motion sustained.

"Mr. Zane:

"Q. How much of your value for the mounting of the indicator system?

"A. Two per cent.

"Q. How much for your levels in the platform?

"A. Five per cent.

"Q. How much for your indicating device as a whole?

"The Witness: Your Honor, may I ask a question of the attorney? I can't get his question of what he means as a whole.

"The Master: Yes.

"A. If I remember correctly, at least I intended to separate that as a whole, the marks on the graduation and the form of the indicator, five per cent.

"Mr. Zane:

"Q. Anything else?

"The Master: What do you mean, anything else included?

Mr. Zane:

"Q. Anything else aside from this that you assign a value?
"A. Yes, the signs or provisions for signs on the scale.
"Q. How much do you assign to those signs?
"A. Assign five per cent to that.
"Q. Is there any other feature you assign any of the economic values to?
"A. No, that covers I think the whole matter substantially. Well, there is certainly a distinctive value to the enclosure of the housing.
"Q. Enclosure of housing?
"A. Enclosing housing.
"Q. Enclosing housing how much?
"A. I should make that five per cent. I would have to reduce some of the others.
"Q. I should think you would. Very well, call that five per cent. Is there anything else that from an economic standpoint you would assign a value to?
"A. No, those are all.
"Q. Do you remember that in your direct examination you assigned twenty per cent to the indicating system?
"A. Twenty per cent to the indicating system?
"Q. Yes.

"Mr. Meads: He didn't.
"The Master: Let the witness answer.

"Mr. Zane:

"Q. Do you remember that you did?
1235 "A. No, I don't remember.
"Q. How much would you assign to the lever system and combination of platform and indicating scale including robust appearance and color, how much would you assign to that?
"A. Twenty-five per cent.
"Q. Do you know what you said for it on your direct?
"A. No. I should have said substantially twenty-five per cent.
"Q. You have no recollection now of what you said on your direct?
"A. No.
"Q. Now, on what theory do you make these separations into values, what's your theory?

"A. When I was in Albany I saw, as I say, and tested myself thousands of different scales, thousands of different computing scales, and talking to the dealers as to what the things were that struck them on different scales, and of course a number of places——

"Q. I am not asking you what you were told but to state your theory of division.

"A. I am basing this division upon the general result of my experience in connection with those things.

"Q. You are not basing it then on anything you have in your mind as a theory to divide?

"A. No.

"Q. Between those parts?

"A. No, just general experience and dealing with these people who were users of scales and consumers.

"Q. Are you in your division from the mechanical standpoint acting upon any theory in your mind as to a division?

"A. Yes, sir.

"Q. What is that theory?

"A. Just as I stated before, on the relative importance of each one of the parts or the mechanism to constitute a whole. The manner in which any instrument maker or a mechanical engineer would go about designing a machine, he would assign a relative importance to the thing, to one certain thing he would light on first as the most important thing to consider.

"Q. Yes, but now what is your theory in fixing relative importance among things that are all necessary, what's your theory in assigning relative importance?

"A. That is the basis of assigning relative importance.

1236 "Q. Well, you say relative importance. Now, on what theory do you fix relative importance?

"A. The relation of one part to another. Of course, all the parts of any kind of a mechanism are related one to another and one part engaging or functioning with the other constitutes the whole, but there are certain parts which are absolutely important in certain kinds of machines, therefore on that theory, as I see it, if I may answer that at length this way, your Honor, I say that I explained or attempted to explain at least this morning that the first thing to consider in any kind of an indicating scale is a counter force system.

"Q. Yes, we have been all over that, but have you any means in your mind of, under a theory of value, fixing a value of things from the standpoint of relative importance?

"A. There can be no such thing as a mathematical analysis of the relative importance.

"Q. Well, do you just guess at this thing in your own mind as to how you would divide it?

"A. Judgment and experience, that's all. The same reason any professional man is engaged on that basis for him to use his general experience in assigning relative importance to the different parts of anything that's been done. I am sure I can't get any closer.

"Mr. Zane: We move to strike out his last statement as not responsive. He is not answering any question.

"The Master: Well, I think it may stand."

Redirect examination.

By Mr. Meads:

"The distinguishing feature between the fan scale made by the Fairbanks Company and the fan scale made by the Toledo Company is that the fan chart on the Fairbanks scale is placed face to face with the platform of the scale—that is, it is directly behind the platform, so that the platform is between the dealer and the fan chart when the dealer is using the scale. In the Toledo fan scale, however, the fan chart is arranged at one side—either the right or the left—of the platform, instead of being directly behind the platform. I have seen the fan type computing scales with charts of larger capacity than ten pounds. I have seen Toledo fan type scales with computing charts as high as forty pounds capacity.

"My economic division was based on the relative utility,
1237 serviceability, marketability and durability of the device, comparing the relation which the various parts of the scale bear with reference to these qualities.

Recross-examination.

By Mr. Zane:

"Q. As to the fan scale it makes no difference to the scale itself where you place the fan chart, does it, whether to one end or the other or in the center?

"A. It is a simply a question of taste from an economic standpoint or a question of design from the mechanical standpoint, of course it makes a different appearing mechanical device as a whole, that's all.

"Q. You say you have seen a fan scale, automatic, computing, with a capacity of forty pounds?

"A. Yes.

"Q. What scale was that?

"A. It was a Toledo scale, one of those with a platter to the right or left of the fan.

"Q. Did it have a forty pound chart on it?

"A. Yes, it had a forty pound chart on it.

"Q. Do you mean to say the chart right straight across it was divided into forty spaces for forty pounds?

"A. No, not straight across.

"Q. Well, on a curve?

"A. On a curve it read up to forty pounds.

"Q. What was the division of the pounds?

"A. Into ounces.

"Q. Single ounces?

"A. Yes.

"Q. How large was the chart?
"A. How large was the chart?
"Q. Yes.
"A. I can't give you the exact measurements. I can give it to you approximately, about 12 to 14 inches across the top, the chord of the upper arc.
"Q. What was the scale used for?
"A. Groceries, grocery store.
"Q. And it weighed down to ounces?
"A. Yes, sir.
"Q. What was the space, the measured space of the pound graduate on that forty pound chart?
"A. Oh, roughly, I should say about between 1/16th and 1/32nd of an inch.
1238 "Q. How did you divide that sixteenth of an inch into ounces?
"A. You would not divide it closer than an ounce, that's the division of an inch.
"Q. I asked you for the pound graduate.
"A. Pardon me, I misunderstood you, I thought you said an ounce.
"Q. Yes. The pound graduate. If you have mistaken the question, now answer it properly.

(Question read as follows: What was the space, the measured space of the pound graduate on that forty pound chart?)

"A. Roughly about an inch as I remember it.
"Q. Well, then, your chart with one inch divided to each space for forty pounds would be practically forty inches across, would it not?
"A. No, because this is a type of scale where you turn a button on it to reverse or flop over a piece on the indicator.
"Q. Yes. So in order to use this scale as automatic you had to have some hand manipulation?
"A. Above twenty pounds, yes.
"Q. What was the hand manipulation?
"A. Turned the gnarled knob in the side of the case which then made the computation. Those that I have seen were all divided into black figures and red figures and for ranges above twenty pounds you read the red figures and for the others the black figures.
"Q. Now, you knew very well that when the counsel asked you if that was an automatic computing scale for forty pounds and you answered yes that you were answering that it was wholly automatic, didn't you?
"A. No.
"Q. Why did you swear that way?
"A. I didn't swear. It is automatic as far as computations are concerned. I had in mind the difficulties you were trying to raise. Your Honor, if I may explain?
"The Master: Yes, explain.

"A. In the Fairbanks scale we have to use mental additions, in the other we do not. This scale is not mechanically, completely automatic, as far as computations are concerned it is automatic, do you see? I would not call it a completely automatic scale, no.

"Mr. Zane:

"Q. That is, you say you turn something?
"A. It has a roller that comes around.
"Q. And that puts an additional weight on the pendulum?
"A. Yes, sir.
1239 "Q. Then you use the red figures?
"A. Yes.
"Q. There are two sets of figures where, on the chart?
"A. On the chart. On the indicator I mean, not the chart. I am familiar with the scale.
"Q. The red figures are on the indicator?
"A. Yes, that flops over,—I use that slang expression—when you turn that weight over, when you increase the weight of the counter force system, increase the weight of the pendulum.
"Q. Now, the red figures on the indicator represent what?
"A. The red figures that are on the indicator represent price per pound.
"Q. Yes, so you have one set of prices per pound in black?
"A. Yes.
"Q. And you have another set of prices per pound in red?
"A. Yes.
"Q. Are they the same prices per pound?
"A. The same prices per pound?
"Q. Yes.
"A. No.
"Q. Which prices per pound are in black and which in red?
"A. I don't remember the exact values of the prices. I suppose they are substantially the same. Well, there is a variation in the various ranges of prices in various computing scales.
"Q. You are not asked that. Answer something that is less obvious but more to the point. What is the range of prices per pound on that scale?
"A. The ones I have seen run up to forty cents a pound.
"Q. Very well. They begin where?
"A. At five cents.
"Q. Five to forty, that's the range?
"A. Yes.
"Q. And why could not you answer what the range was? It begins at five cents and ends at forty. How many different prices per pound are there?
"A. I am sure I don't know.
"Q. I thought you said you were perfectly familiar with that scale?
"A. I am not acquainted with the details of how many figures there are on that scale.

"Q. About how many do you judge, how many different prices per pound are on the scale?

1240 "A. Approximately about twenty.

"Q. About twenty?

"A. Yes.

"Q. You have five cents on it of course?

"A. Those I remember had five cents on them, yes.

"Q. Does it have six?

"A. I think they even had four cents.

"Q. I asked you for the range. You said it was five to forty cents. Now, are you changing the range to four cents to forty?

"A. The approximate range is from five to forty.

"Q. Do you know what the range is?

"A. I don't know the details of what the range is.

"Q. Very well. Part of your prices per pound are in black and part are in red?

"A. Yes.

"Q. Is that what you say?

"A. Yes.

"Q. Where do they change from black to red, where in the range of prices?

"A. I do not know exactly where they change.

"Q. About where?

"A. Well, I can't answer that, I don't know about where.

"Q. Well, are the higher prices per pound in red?

"A. Yes.

"Q. Is there a thirty cent per pound on the scale?

"A. I don't know.

"Q. Is there a thirty cent price per pound on the scale?

"A. I can't say positively, in all probability there is.

"Q. Well, give us your best judgment——

"A. My best judgment is there is thirty cents.

"Q. Where is that price upon that range of prices?

"A. Half way.

"Q. Half way in the number and not in the value of prices per pound?

"A. Yes.

"Q. Half way in the number. Now, when you turn your knob for the red prices per pound what figures do you read on the chart?

"A. I don't understand the question.

(Question read.)

"Q. Do you read the figures in black on the chart?

"A. When you turn the knob, the knob turns an additional weight on that and then you read the red figures.

1241 "Q. Then you read the red?

"A. Yes.

"Q. So if you had an occasion and were weighing at four cents a pound or five cents a pound and your entire transaction was at forty cents a pound, your scale would not work until you had made a change in the scale?

"A. That's true.
"Q. Then your scale is not automatic throughout to forty pounds?
"A. No, not completely automatic.
"Q. So your answer that it was a forty pound automatic computing scale was not true?
"A. It is not a computing automatic.
"Q. Well, your answer was not true, was it?
"A. My answer was true.
"Q. That it was an automatic computing scale for forty pounds, do you say that was true?
"A. I can't answer that yes or no.
"Q. Do you say that answer was true?
"A. I said my answer was true, yes.
"Q. Although you admit that the scale requires manual manipulation before it will pass from the lower range of figures to the higher?
"A. As far as mechanically is concerned, it is not automatic, that's the reason I made the distinction between completely automatic.
"Q. Is your distinction between a thing that is mechanically automatic and economically automatic, is that the distinction you are making here? How can a thing be automatic in any other way than mechanically automatic? Are you still thinking of an answer to that question?
"A. Pardon me, I didn't catch the question.
"Q. We have been waiting with patience to hear your answer.

(Question read.)

"A. How can a thing be automatic?
"Q. Yes, how can this scale be automatic in any other way than mechanically automatic?
"A. For instance, I tried to make the distinction——
"A. I don't care what you tried to make.

"Mr. Meads: Finish your answer, and if it is not satisfactory, counsel can move to strike it out.

"A. —between automatic as to computing and automatic as to mechanical operation. Mechanically if it is not automatic, you have got to do an overt act by moving a poise or turning
1212 a knob or something else, yet the computations might be automatic without requiring any mental process of addition as you do, for instance, in the Fairbanks fan shaped scale.
"Q. What do you mean by overt act?
"A. Touching with your hand.
"Q. You mean some manual act?
"A. Manual act.
"Q. Now, after you go past twenty pounds in order to get up to forty pounds in there any further change to be made in the scale?
"A. Yes, sir, then you have to turn that knob.
"Q. You do that at twenty pounds?
"A. Yes, sir.

"Q. When you go from above thirty pounds, do you make any other change?

"A. Not that I know of.

"Q. Well, you know all about this scale, intimately acquainted with it, can you tell us whether there is a further change?

"A. Than turning the knob?

"Q. A further change of any kind by what you call an overt act.

"A. I mean a manual act. No, not that I know of. (To the Master:) May I explain something, your Honor?

"The Master: If it is necessary to make your answer plain, but I don't want to hear any argument on the question.

"Mr. Zane:

"Q. Now, another thing is apparent about that scale, is it not, that when you have got your knob turned and are using the red computations for the higher prices per pound, you can't use the black for the lower prices?

"Q. And in order to get back to the black you have got to turn your knob again?

"A. Yes, sir.

"Q. And you can't use the red figures after that is done?

"A. That's right.

"Q. So that that chart is practically what would result if you had one scale for the higher prices per pound and another scale for the lower prices per pound in there, it does not do anything else, does it?

"A. In there, that's right.

"Q. If the man had the two scales, one for the lower prices per pound and the other for the higher prices per pound, before him on the counter, by throwing what he wanted to weigh on
1243 either one or the other scale he would be doing exactly the same thing in effect as what he is doing when he turns the knob on the chart?

"A. It is two scales built in one, yes.

"Mr. Zane: That's all."

Re-redirect examination.

By Mr. Meads:

In the Toledo fan scale which I have described, there is no mental calculation required on the part of the operator to obtain the computations. This is not true of the Fairbanks fan scale, because with that you have to make a mental addition of two different computations."

Recross-examination.

By Mr. Zane:

"Q. Suppose a man when the knob was turned and the red figures were on should happen to read the black, what would be the result?

"A. If he read the black when the red figures were on, he would make an error of approximately one hundred per cent.

"Q. Yes. To know whether he had made that mistake or not he would have to make a mental calculation, would he not?

"A. That would be at the utmost a question of his experience and judgment in his business, yes. I don't know whether you would call that a mental process.

"Q. He would have to make a calculation to see whether it was too high or not high enough, would he not?

"A. In my own judgment he would not because that's a psychological question, if he put this in, his judgment and experience in business would show it could not be ten pounds, it must be between ten and five. Of course, he could make that error.

"Q. Suppose one clerk uses the scale and turns the knob and leaves it in the red, another clerk comes along with something to throw on the scale that is in the lower range of figures, does the scale look any different, the chart and the indicator look any different when the red figures are on by the knob than from what it is when the black figures are on by the knob?

"A. The scale as a whole looks different, yes, because it throws, those I have seen, shows up an indicator when you are in the red, throw up a sign, 'Read the Red'.

1244 "Q. There is a sign there?

"A. Yes.

"Q. 'Read the red'?

"A. Yes.

"Q. That's the way in which.

"A. That calls attention to it, yes.

"Q. One clerk would tell whether another clerk had changed that scale from the last time he had used it?

"A. Yes."

HALVOR O. HEM, a witness recalled on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

Q. I want to direct your attention to one portion of your testimony on your direct examination. Directing your attention to that portion of your testimony in which you spoke of substituting a cone in the place of the cylinder in the scales known as Complainant's Exhibit of Defendant's Scale and Defendant's Exhibit 55, if such a cone was substituted in place of the cylinder, would the diameter of such a cone at its greater end be of substantially the same size as the cylinder in question?

"Mr. Zane: He asserts in the first part of his question this witness has testified something about substituting a cone. This witness on his direct examination never testified about substituting a cone.

"Mr. Meads: Very well.

"Mr. Zane: Do you withdraw that question?
"Mr. Meads: I withdraw the question.

"Q. Mr. Hem, in place of the cylinder in Complainant's Exhibit of Defendant's Scale and in Defendant's Exhibit 55 what substitutes, if any, can be used in place of the cylinder?

"Mr. Zane: We object, this man is not competent to speak on that point.
"Mr. Meads: I would like to ask a few questions of him.

"Q. Mr. Hem, on your direct examination you stated the time you have been in the employ of the Toledo Scale Company. When did you go to that company?
"A. October 1st, 1915.
"Q. You wish to correct your testimony in that regard?
"A. If I made a mis-statement, I do.
1245 "Q. Mr. Hem, since you have been with the Toledo Scale Company what has been your position?
"A. I have spent most of the time designing new scales cylinder scales, fan scales, revolving dial scales and revolving indicating hand scales.
"Q. What have you done to familiarize yourself with the products of the Toledo Scale Company?
"A. I looked over a great number of the drawings, practically all the scales, not only in the drawings and in the drawing room but as well in the factory in the various stages of construction.
"Q. Has that work been continuous since your employment by the company a year and a half ago?
"A. It has.
"Q. In your designing of new scales did you examine all the former products of the company?

"Mr. Zane: We object as leading.

"Mr. Meads:

"Q. State what you did.
"A. Substantially so.
"Q. Did you at any time disassemble or see the interior mechanism of a scale such as Complainant's Exhibit of Defendant's Scale?

"Mr. Zane: Objected to as leading.
"The Master: Objection overruled.

"A. I have.

"Mr. Meads:

"Q. Have you at any time disassembled and examined the interior mechanism of a scale such as Defendant's Exhibit 55?

"Mr. Zane: Object as leading.
"The Master: Objection overruled.

"A. I have not disassembled the scale myself, I have seen the parts disassembled and examined them.
"Q. Have you reassembled such devices?
"A. I have not reassembled it myself but I have seen them in the scale reassembled.
"Q. Was it reassembled in your presence?
"A. Yes.
"Q. Are you familiar with the various parts of the device in question?
"A. I am.
"Q. Do you know all the elements on this device?
"A. I do.

"Mr. Meads: I will pursue this as far as the court wants me to. It merely goes to the weight of the testimony.

(Discussion.)

1246 Cross-examination.

By Mr. Zane:

"Q. What department are you in there, what do you call your department?
"A. I call my department consulting engineer's department, but in addition I have several draftsmen working doing nothing but designing new scales.
"Q. Draftsmen, yes, and are you in the designing department or in the invention department?
"A. I do the designing.
"Q. You are in the designing department?
"A. Yes, sir.

"The Master: He must have more familiarity and knowledge on the subject than the rest of us here have and is himself a mechanic and as he has had considerable experience in mechanical work, while not exactly on the lines you are inquiring about now, it is still at least a kindred line. I will take his testimony.

Direct examination (continued).

By Mr. Meads:

(Pending question read as follows: Mr. Hem, in place of the cylinder in Complainant's Exhibit of Defendant's Scale and in Defendant's Exhibit 55 what substitutes, if any, can be used in place of the cylinder?)
"A. Cone, dial revolving indicator and several other modified forms which might be used.
"Q. Now, in the first of the devices which you have mentioned, to-wit, a cone, if a cone was substituted in place of a cylinder in either of the devices, would the diameter of such a cone at its greater end be substantially the same as that of the cylinder?

"A. It would.

"Q. What would the capacity of the cone at the diameter be for the various value computations as compared with the cylinder?

"A. Be practically the same.

"Q. At the smaller end of such a cone in the arrangement of the pounds per price at which the commodity is offered for sale, which prices would you put upon such a cone?

"A. Put the higher prices at the large end and the lower prices at the small end.

"Q. On such an arrangement would it be possible to have exactly the same distance between the value graduations at the lower prices per pound as at the higher prices per pound?

1247 "A. It would.

"Mr. Zane: This is all leading. We want to object to this style of examination.

"The Master: It is leading, but no objection has been made to the questions.

"Mr. Meads:

"Q. In a cylinder construction of scale as compared with a cone will you please state whether such an arrangement of figures is possible?

"A. They are not possible.

"Q. In which form of construction then is the advantage?

"A. The advantage is in the cone construction.

"Q. To have the cone operate so that the face of the cone exposed towards the observer will be parallel with the front edge of the scale, what change in mountings, if any, would be necessary?

"A. One end of the shaft would have to be moved towards the poise side of the scale equal in the radius of the cone—equal to the distance in the radius of the cone of the two ends.

"Q. The other mounting would remain the same?

"A. The other mounting would remain the same.

"Q. What would operate or cause the revolution of the cone in the scale which you have described, the substituted cone?

"A. Just exactly the same as in the chart. It would have a pinion on the shaft which would be driven by a lever connected to the scale lever.

"Q. Would the same rack and pinion be used as in Exhibit 55?

"A. Exactly the same rack and pinion.

"Q. Turning now to the second of the substitutions which you have mentioned, that of a disc and dial, what would be the connection which caused the revolution of such disc or dial in the substituted device?

"A. Rack and pinion.

"Q. The lower end of the rack would be connected with what, if anything?

"A. With the scale lever which supported the platform.

"Q. The upper end of the rack would travel across what?

"A. Across the pinion.

"Q. And that pinion would be attached to what?
"A. Would be attached to the shaft on which the dial is mounted.
"Q. Is that form of construction familiar to you?
1248 "A. It is.
"Q. In this connection, Mr. Witness, you are familiar with the various fan shaped scales made by the Toledo Company, are you not?
"A. I am.
"Q. What to your knowledge is the capacity of the largest fan type scale made by that company in which the scale is purely automatic?
"A. Forty pounds is the largest I have seen.
"Q. Forty pounds?
"A. Yes.
"Q. I am not now referring to a scale in which there is any shift of the indicating hand to show red or black but a purely automatic scale mechanically and every other way.
"A. Purely automatic from nothing to forty pounds.
"Q. In the third substitution which you have mentioned, the substitute of a pointer traveling over a fixed dial, what would be the connection between such a pointer and the counterbalancing mechanism of the scale?
"A. A rack and pinion.
"Q. To what would the lower end of such rank be attached?
"A. To the scale lever supporting the platform.
"Q. And over what, if anything, would the upper end of the rack operate?
"A. Operate over and in with the pinion.
"Q. The pinion would be attached to what?
"A. The shaft on which the indicator is mounted.
"Q. Have you ever seen that kind of an automatic computing scale?
"A. I have. I am not so sure about the complete revolution of the hand.
"Q. Whether the hand completely revolves or operates in an arc of 180 degrees, you have seen that type of scale?
"A. Yes.
"Q. Was that form of construction new or old?
"A. Old.
"Q. Give the court some notion what you mean by old?
"A. I can't say exactly as to the age of it, but several years, judging by the old scales which I have seen at the Toledo Scale Company.
"Q. Mr. Hem, what do you mean by a double faced scale?
"A. One which can be read from either side.
1249 "Q. In the device which you have described in which the movable dial travels by a fixed indicating line could such a substitute be a double faced scale?
"A. Yes.
"Q. In the device which you have described in which a movable

indicator travels about a fixed dial, could such a substitute be used so as to make a double faced scale?

"A. By using a double indicator.

"Mr. Meads: I think that's all.

"Cross-examination.

By Mr. Zane:

"Q. What would be the dimensions of the cone that you speak of as a substitute?

"A. Anywhere from eight to nine inches. If it were to go in that same housing, it would have to be the same diameter as the diameter of that housing. I think that is eight or possible eight and three-quarters inches. I have not got those figures definitely in my mind.

"Q. You mean eight to nine inches in diameter at the larger end of the cone?

"A. Yes.

"Q. What at the smaller end?

"A. It can be any diameter at the smaller end.

"Q. Well, what would you make it?

"A. Well, make it four inches.

"Q. Four inches at the smaller end?

"A. Say four. It could even be made smaller. It is immaterial except as to the spacing of the graduations.

"Q. And you would have other connections through practically the same rack and pinion operating the cone?

"A. Absolutely the same.

"Q. And you would have the cone arranged with its axis horizontal?

"A. Yes.

"Q. You would have a slit in front of the cone to look at the figures on that side?

"A. No. I would not have any slit in the cone.

"Q. What would you have?

"A. I would have a continuous——

"Q. What would your housing be for the cone, in conical form?

"A. The housing can be either in a conical form or practically any cylindrical form.

1250 "Q. Which would you have it, cylindrical or cone like?

"A. That's practically immaterial.

"Q. Well, you are telling us about how you would construct out of this scale a cone scale. Now, what would you have your opening in the housing outside of the cone, would you have that a cylindrical housing or would you have it a cone housing?

"A. That's absolutely immaterial. If I was to put a zone in that same housing, I would have it cylindrical, or if it was a new housing, I could have it cone housing.

"Q. But you could leave that housing exactly the same?

"A. Yes.

"Q. By keeping the diameter of the larger of your cone the same as the diameter of this indicator drum?

"A. That's right.

"Q. Now, to come back to the proposition, you thought I asked you in regard to anything interfering with the indicator cone drum, what I mean was where you would have your slit in the cone housing. You have already answered that. Now, have you ever considered or thought whether you would avoid the infringement of a patent by changing the form of your cylinder alone?

"A. I did not consider that. I didn't even know there was a patent on the cylinder before I heard some conversation here.

"Q. So far as you know your mere change in the form of the indicator drum would not have any effect upon the rights of the patentee of the indicator drum at all?

"Mr. Meads: I object to that. He has not attempted to pose as an expert on law. He is merely a mechanical expert.

"The Master: He is only speaking of a mechanical construction here. He says he does not know there was a patent and he of course could not have considered it and he is not an expert along those lines any way.

"Mr. Zane:

"Q. Did you ever take a scale like Exhibit 55 of the defendant and attempt to substitute a cone cylinder in it?

"A. I have not attempted to substitute a cone in it.

"Q. Did you ever have any such work done under your direction?

"A. I have not.

"Q. Now, the second substitution you spoke of was a dial. Do you mean a fan shaped dial or a circular dial?

1251 "A. I had reference to a circular dial.

"Q. And that circular dial you would make revolve?

"A. I would make the dial revolve.

"Q. Did you ever attempt to take a scale like Defendant's Exhibit 55 and substitute a revolving dial on the scale instead of the indicator drum mechanism?

"A. I have designed scales with the revolving dial, but I have not attempted to attach a dial to the very scale which was built, but I have taken other scales and substituted a dial in place of the cylinder in making a drawing.

"Q. What other scales?

"A. Fan scales.

"Q. Did you ever build such a scale?

"A. The scale has not been built yet, but the drawings are made for it.

"Q. You made drawings?

"A. Yes.

"Q. The scale has never been built?

"A. I have not built such a scale.

"Q. Do you know of anybody who has?
"A. Yes, I do.
"Q. Whose scale?
"A. There is the Richmond scale. I have seen it with it with a revolving dial I believe.
"Q. The Richmond scale?
"A. I believe that's the name of it.
"Q. Is that a pendulum scale?
"A. I have not got a distinct recollection in regard to that, but it is my impression it is not.
"Q. It is not.
"A. It is not.
"Q. What kind of a scale is it?
"A. It is a revolving dial scale, counter scale.
"Q. Yes, you said that before. If it is not a pendulum scale, what kind of a scale is it as disinguished from pendulum?
"A. It may be a spring scale.
"Q. Do you know?
"A. I said I did not know, I don't remember. I didn't pay any special attention to that feature of it. I paid attention to the dial and its connection.
"Q. What other kind of a scale might it be, not a pendulum, not a spring, what othe- kind of a scale might it be?
"A. I don't know what else it might be. Of course, a great
1252 many different kinds of scales can be built with different counteracting forces.
"Q. Well now, what is your best recollection?
"A. In regard to this old scale?
"Q. In regard to this scale, as to what kind of a scale it was.
"A. My best recollection is that it was a counter scale or a platform and revolving hand or revolving dial which was mounted on a shaft with a pinion fastened to the shaft.
"Q. Yes, but what is your best judgment as to whether it was a pendulum scale or not?
"A. I didn't pay any special attention to it, at least not so as to remember it.
"Q. Where did you see this Richmond scale?
"A. Saw it in Toledo.
"Q. When?
"A. I think about the 1st of the year.
"Q. Had you ever seen one before that? You mean by the first of the year the first of this present year?
"A. First of this present year, yes. Yes, I have seen revolving dial scales——
"Q. Oh, the Richmond scale we are talking about.
"A. —before that among the old scales which the Toledo have in the store room where they have quite a number of scales which they have picked up from time to time.
"Q. And those were Richmond scales?
"A. No, I don't think so.

"Q. I asked you about Richmond scales. Did you ever see a Richmond scale before this one you saw in Toledo the first of this present year?

"A. Not so as to pay any attention to them.

"Q. Well, do you mean to say now that you do not remember seeing such scale?

"A. I mean to say now that I do not remember of seeing any Richmond before the one I saw in Toledo, not so as to remember it was a Richmond scale.

"Q. Well, do you remember such a scale at all?

"A. I do remember of seeing such a scale at all, yes, I remember of seeing one in Toledo about the first of this year.

"Q. Beyond that do you ever remember of seeing any Richmond scale?

"A. Not that I remember of.

"Q. Do you know where this Richmond scale came from, what company made it?

1253 "A. I do not.

"Q. Do you know whether it was a patented scale or not?

"A. I do not.

"Q. Well, what was the general appearance of this Richmond scale?

"A. In regard to whether it was patented or not?

"Q. No, no, only as to its general appearance.

"A. The general appearance was that it was a platform scale where a platform was supported on a lever system and the lever system connected in some manner to a revolving dial.

"Q. Was the dial in the center of the scale or at one end of the scale?

"A. It was to one side of the platform.

"Q. It was on one side of the platform, was it?

"A. Yes, it was one side of the platform. Do you mean whether it was in the center of the platform or not?

"Q. No, center of the whole scale.

"A. No, it was not in the center of the whole scale.

"Q. Was it on the platform end of the scale or on the other end of the scale.

"A. It was on the base of the scale, it was mounted on the base of the scale.

"Q. Exactly, but the platform was on one end of the scale, was it?

"A. Yes, the platform was on one end.

"Q. Now, was the dial on that end of the scale or towards the other end of the scale?

"A. It was on either end turning which way you turned the scale.

"Q. Think about it for a minute.

"A. Just exactly the same as this book. Here is the heading, now it is on this end, and if you turn it around it is on the other end.

"Q. But you have turned your platform end. Stick to the platform end of the scale.

"A. Make me a drawing and I will tell you.

"Q. You are the one that is testifying about this scale, you are under oath. This is not matter for you to be reckless about. Take the platform end of that scale, get that into your head, then is the dial in the center of the scale or toward the platform end of the scale or toward the other end of the scale?

1254 "A. It is impossible for me to grasp what you are driving at.

"Q. You have got a scale lever there, have you not, a scale beam?

"A. There is a scale lever.

"Q. A beam?

"A. A lever.

"Q. How long was it in this Richmond scale?

"A. I didn't measure it.

"Q. Well, about?

"A. Well, it might have been twelve or fourteen inches.

"Q. Now how close to one end of the scale was sthe platform?

"A. I think the platform was substantially at one end of the scale. The edge of the platform I think was substantially at one of the scales base.

"Q. Now, go to the other end of the scale base. Where with reference to that other end of the scale base was the dial?

"A. It was at the other end of the scale base.

"Q. Now, you have it at last. On one end of your scale base is the platform, at the other end is the dial, that's true is it?

"A. I think that's substantially true.

"Q. How large a dial was it?

"A. My recollection would be that the dial on that scale was approximately fourteen inches I should judge.

"Q. Fourteen inches in diameter, fourteen inches in diameter?

"A. I did not measure the scale in any way at all, I merely looked the scale over.

"Q. Yes, that is sufficiently apparent, but I am trying to get your best recollection about it. Now, was the scale a tall scale or was it one that was close to the counter upon which it sat?

"A. The platform itself I think was comparatively close to the platform, maybe four to six inches from the counter according to my recollection.

"Q. Now, how close to the base of the scale did the lower edge of the dial come?

"A. I think that the lower—I really don't remember.

"Q. What was the connection between the scale lever and the dial?

1255 "A. I don't remember that.

"Q. Now, on this scale, if you were starting out to change this scale into a dial scale, that is, a revolving dial scale, where would you cut this scale off?

"A. I would take it off where the chart housing is counted on the housing enclosing the pendulum.

"Q. And above that you would put your revolving dial?

"A. Yes, sir.

"Q. Making suitable connections?

"A. Making suitable connections.

"Q. Did you ever attempt to do such a thing as that with a scale like Defendant's Exhibit 55?

"A. I did not attempt to put a dial on that scale, but I have designed a dial to go on another scale.

"Q. Now, can you draw off that design for us that you have made?

"A. I expect I could.

"Q. Well, I wish you would do it then.

"A. (Witness makes drawing.) This is substantially what this scale is like. (Hands drawing to Mr. Zane.)

"Q. Where is the indication on this dial that shows where your chart indications are?

"A. (Makes addition to drawing.) On this scale we have a stationary indicator with a reading wire and then the indicator and the price range is on a stationary chart which extends from the center of the scale up to the periphery of the base.

"Q. Not center of the scale, center of the dial you mean?

"A. Center of the dial.

"Q. And on that you have price indications?

"A. On that chart we have price indications.

"Q. What do you have on your disc?

"A. Weight indications and computations of prices or values.

"Q. Do your weight indications run clear around the dial?

"A. They run clear around the dial.

"Q. And what is the diameter of the dial?

"A. I think that dial is about ten inches in diameter.

"Q. What's the capacity of the scale?

"A. The scale which I designed was for five kilograms by twenty-five grams.

"Q. Oh, tell us in pounds.

"A. You will have to get at the pounds by multiplying by 2.2.

1256 "Q. Oh, tell us what the capacity of that scale was in pounds?

"A. It was not made in pounds and was not designed in pounds.

"Q. It was a certain capacity in weight, what weight was that equal to in pounds?

"A. On this very particular scale it was equal to approximately eleven pounds.

"Q. Did you have a further arrangement on the scale by which you could increase the capacity of the scale?

"A. I did not on this one.

"Q. What was your price range on your scale?

"A. I think that runs on this very scale which was designed for one of the Scandinavian countries, and I think the price was for ten oras to one hundred per kilogram.

"Q. That was a scale for Sweden?

"A. Sweden or Norway or Denmark, that is, the chart was designed with the prices on it for those countries. Of course any kind of graduation can be put on the chart so as to be suitable for any country.

"Q. What was the lowest indication on that scale of the price?

"A. Ten.
"Q. Ten what?
"A. Ten oras.
"Q. What was the highest indication on the scale for price?
"A. One hundred.
"Q. What would ten oras be in the money of the United States?
"A. About three and one-third cents.
"Q. And the one hundred would be thirty-three cents?
"A. Approximately so, perhaps twenty-six or twenty-seven cents.
"Q. How many price indications did you have on the scale?
"A. On this scale I don't remember, but I think perhaps twelve or fourteen prices.
"Q. Twelve or fourteen prices per pound. Now, this scale was made like one of your fan scales except that you have a rack and pinion operating the disc and you have a disc instead of a fan chart, that's the difference, is it not?
"A. The fan charts on the Toledo scales are stationary. This is a revolving dial.
1257 "Q. Yes, but the difference between the mechanism and the general appearing of the scale is that you have substituted for the fan chart a revolving dial, you have made the indicator a stationary hand and you have made a connection through with a rack and pinion. Now, is there any other difference?
"A. That's substantially correct.
"Q. The platform of the scale is what is marked P here?
"A. Yes.
"Q. The scale lever is what is marked L?
"A. That's correct.
"Q. The fulcrum point is marked F?
"A. That's correct.
"Q. The support is marked S?
"A. The pivot supporting the platform you might say is marked S.
"Q. The rack bar is marked B?
"A. Yes.
"Q. The indicator hand is marked I?
"A. There is not an indicator hand on it.
"Q. Well, the thing that carries the price per pound.
"A. All right.
"Q. That is marked I, the disc is marked D, the pendulum is marked P, the strap is marked S'?
"A. All right.
"Q. The cam is marked C?
"A. That's correct.
"Q. And the base is marked B?
"A. That's the way you have marked it.
"Q. Now, this represents your design for a revolving dial scale?
"A. It does.
"Q. When did you design this?
"A. Last fall.

"Q. Well, what month shall we say that you finished your design?

"A. Well, possibly along in October.

"Q. October, 1916?

"A. Yes.

"Mr. Zane: Mark that for identification.

(Said drawing made by witness marked for identification Plaintiff's Exhibit 59.)

"Q. Since you had there all your scale parts, scale base, scale lever, housing and everything of that kind arranged why didn't you build up this design of yours for a disc by using the parts up to the cylinder and then take out the cylinder?

1258

"Mr. Meads: I object to that form of question.

"The Master: Objection overruled.

"A. For the simple reason that the scale this was designed for is a scale of light capacity, for weighing light commodities, and the cylinder scale is for weighing heavy commodities, so there would be no sense in taking a scale of that capacity and make it for a scale of five kilogram capacity.

"Q. Have not you cylinder scales of light capacity?

"A. Yes.

"Q. You have cylinder delicatessen scales, have you not?

"A. We used quite a number of various charts in cylinder scales.

"Q. Yes, you have cylinder scales of a capacity not exceeding ten pounds have you not?

"A. I think so.

"Q. You have cylinder scales of as low a capacity as seven pounds, have you not?

"A. We may have, I have not seen them.

"Q. Now, do you want to give any other reason than the one you have given as to why you didn't alter your cylinder form of scale in order to put this dial on it?

"A. No, the reason I have given is a very good reason and a further reason would be that I didn't want to lose my job. If I should have attempted to take a cylinder scale of that capacity and convert it into a scale of five kilograms capacity——

"Q. We are talking about a cylinder scale of ten pound capacity.

"A. I didn't know they wanted cylinder scales of ten pound capacity.

"Q. Why didn't you take one of your cylinder scales of ten pound capacity and change it into this disc scale?

"A. We had no requirement that I knew of for such a change. If they should want such a change, why, it would be easily made.

"Q. Is that the best reason you can give?

"A. Yes. If the Toledo Company wants such a change, I will be delighted to make it for them.

1259 "Q. Now, your third form of substitute would be to take out of this scale the cylinder, take away the cylinder housing and put a chart up there with a revolving hand?

"A. Yes.

"Q. What would be the shape of your chart?

"A. The chart could be circular.

"Q. Which would you make it?

"A. It is difficult to say just which I would make it. I would in all probability make it circular.

"Q. You would make it a circular chart, not a fan?

"A. Or semi-circular. It is just merely a matter of taste.

"Q. And make the hand revolve across it?

"A. Yes.

"Q. Would you have the rack and pinion connection?

"A. Yes, you could use the rack and pinion connection or a pivot bearing.

"Q. Well, which would you have?

"A. That would depend on whether I would make a complete chart or just an indicator with a rack and pinion.

"Q. Which would you do?

"A. When I get to design that, then I will determine on it.

"Q. You have already designed it. You have told us you would take this scale before you, Exhibit 55, and you would take out the cylinder and you take away the cylinder housing and you put as a substitute for the cylinder and the cylinder housing a chart and dial on there with a revolving hand and you say that's a perfect substitute.

"A. Yes.

"Q. Now, what I want you to tell me is in making that substitution do you use the rack and pinion connection?

"A. Yes.

"Q. You would use a rack and pinion?

"A. Yes.

"Q. You would throw aside the fan scale construction which you have down there at Toledo?

"A. No, we would not throw away the fan scale, we would still keep those I imagine.

"Q. Do you understand what fan scale construction means?

"A. Yes, sir.

1260 "Q. Well, would you throw away the form of construction where there is no rack and pinion connection between the revolving pointer and the disc or cam over which the strap moves and substitute in place of that a rack and pinion?

"A. I would not throw it away, I would not use it to start with in this construction.

"Q. You would disregard it and use the rack and pinion construction, would you?

"A. In one form I would use the rack and pinion.

"Q. Did you ever do such a thing as that with a scale?

"A. Yes.

"Q. When was that?

"A. Well, that's what we are doing right along. That's common construction for us. We are making these and have been making them ever since I have been at the Toledo.

"Q. When did you do it?

"A. I designed such as that shortly after I came to Toledo, but they were using them long before that time.

"Q. You designed one before you came to Toledo?

"A. No, I didn't say that. Well, I did too, I forgot about it, but I did do it.

"Q. Which are you going to swear to?

"A. I am going to swear to both, that I designed it before I came to Toledo and I designed it after I came to Toledo.

"Q. All right. You designed a scale of this kind before you came to Toledo. Take a piece of paper and draw out what you designed.

"Mr. Meads: I suppose that's somewhat at the discretion of the witness.

"The Master: No, I think it is his duty to make the drawing if requested.

"A. (Witness starts to make a drawing.) This revolving hand, however, was made on a scale in connection with a beam scale but which is substantially the same.

"Mr. Meads: Go ahead and make the construction.

"A. (Witness completes drawing and hands same to Mr. Zane.) This is substantially the scale beam which is marked B, the stationary chart is marked C, we will mark the indicator I, we will mark the rack R, the counter force this time was a spring, I will mark that S, and it was connected inside of an oil dash-pot with a plunger on the same stem to which the spring was connected.

1261 "Q. Where was the support of your scale beam?

A. The support of the scale beam was on the frame-work which carried a beam.

"Q. Well, where is the rest of the scale here?

"A. This is the fulcrum F. Now, a platform was connected to this pivot which we will call L.

"Q. To the platform down here?

"A. To the platform, connected to the lever system?

"Q. Where was the support of the scale beam?

"A. I would have to make you another drawing in order to show that distinctly.

"Q. Can't you indicate that?

"A. Well, the drawing is too large to indicate it in proportion, the frame supporting the beam and the dial was mounted between two columns with two sleeves and this dial mechanism was in between the two sleeves.

"Q. Well, where would the support attach, how did you support your fulcrum?

"A. The fulcrum was supported from this periphery between the

columns. This is one of the sleeves. Now, the column went through. Here is one column, and then another column would be above there.

"Q. And two columns joined together at the top?

"A. A shelf going from one column to the other.

"Q. Yes, and your support for your fulcrum, did that go back into a column?

"A. No, it was supported from the shelf carried by the two columns.

"Q. From the lower shelf?

"A. The one which I made was supported from the upper shelf.

"Q. The fulcrum point was supported from the upper shelf?

"A. Yes. I made these springs and they are still making them.

"Q. Yes.

"A. We are making that scale, as I recall it, now. The first was made in about 1902.

"Mr. Zane: I wish to have that drawing marked for identification.

(Said drawing marked for identification Plaintiff's Exhibit 60.)

1262 "Q. Now, you say the Toledo Company when you came there was making a scale of that kind?

"A. They were making a revolving indicator scale.

"Q. We are talking about a scale now where there is a disc with a hand revolving over it.

"A. Yes, sir, that's right.

"Q. You say the Toledo Company was making such a scale when you came there?

"A. Yes, sir.

"Q. Did that have a rack and pinion connection?

"A. It did.

"Q. Do you remember the number of the scale, the style number?

"A. Well, the style number, we called them 800 type, there was 800 and 1500 and 900.

"Q. Just take a sheet of paper now and draw off the design of that scale. By the way, what was its capacity?

"A. We are making those scales in capacity from I think twenty-five pounds up to twelve thousand pounds so far.

"Q. Were they computing scales?

"A. No, not of that capacity.

"Q. Well, draw us a scale, we are talking about automatic computing scales. You are not going to change this scale into a computing scale, are you?

"A. This would be a computing scale simply by printing the graduations on the figures and put a price value on the indicator hand.

"Q. Was the Toledo Scale Company making a computing scale with a hand revolving across the chart and a rack and pinion connection?

"A. I don't remember of such a scale made by the Toledo Company.

"Q. All right.

"A. Not a computing scale, but they are making a scale with a hand revolving over a chart simply by printing the chart with a computation of figures and putting the prices on the indicator hand and we would have such a scale.

"Q. Now, just take that scale you speak about and draw a picture of it for us.

"A. We are making quite a number of scales, which do you want?

"Q. That you describe with a rack and pinion connection and with a hand revolving over a chart.

1263 "Mr. Meads: Such as the Toledo made, just draw a picture of it.

"A. I was trying to determine which type to draw because we make so many of them. (Makes drawing which he hands to Mr. Zane.) This perhaps will show you approximately what it is.

"Mr. Zane:

"Q. Where is the platform of the scale?

"A. The platform is here.

"Q. Mark the platform?

"A. I mark the platform P.

"Q. What is the capacity of that scale?

"A. Just of that type I think we are making nothing above 125 pound capacity.

"Q. Now, this is the type of your heavy platform scale that you make up to 1,200 pounds, is it not?

"A. Yes, we make those in types or in capacity up to 1,200 pounds.

"Mr. Meads: If those are to be offered, I wish some indication may be made that counsel is making notes on the sheet.

"Mr. Zane: 125 pounds up to 1,200 pounds.

"Mr. Meads: And you have written that on the sheet?

"Mr. Zane: Yes.

"Q. Now, when you have that large type of scale the platform is a large platform of a different construction from this?

"A. Not in those capacities.

"Mr. Zane: Mark that drawing for identification.

(Said drawing marked for identification Plaintiff's Exhibit 61.)

"Q. Have you ever taken a cylinder scale, one of the Toledo scales, and altered it by putting on it a chart with a revolving hand?

"A. I might not have made any such changes in it.

"Q. Now, you spoke of other substitutes, several other modified forms that might be used. What were they, what are such other forms?

"A. Fan type charts can be used.

"Q. Fan charts?

"A. Yes.

"Q. With a rack and pinion connection?
"A. With or without.
"Q. You were making the charts without, were you not?
1264 "A. Yes.
"Q. What else, what other forms of substitute?
"A. Well, there is a number of forms, double cone can be used.
"Q. Double cone?
"A. Yes, or single cone.
"Q. What do you mean by double cone?
"A. Well, that would be—take two frustrums of a cone with a base with their small ends placed together.
"Q. And you would have your smaller values in the middle?
"A. No, I would have the larger values in the end.
"Q. Oh, the larger ends put together.
"A. The larger ends put together.
"Q. I misunderstood what you said, a double cone?
"A. Such as that can be used.
"Q. And your larger values would be in the center and the smaller values go out to either end of the cone?
"A. If a double cone were used with their bases together.
"Q. What I meant to ask you was if you would have your arrangement of a double cone, the two large ends of the cone meeting in the center and going out in either direction to smaller ends, then under that arrangement you would have your larger prices per pound towards the center of that double cone and your smaller prices per pound towards the smaller ends of the cone, would you?
"A. Yes.
"Q. What other substitute?
"A. I think those substitutes lend themselves the best to that use in connection with that scale.
"Q. Do you think of any other?
"A. I have not any other in mind just at this time.
"Q. Now, you spoke of a fan scale of forty pounds wholly and purely automatic?
"A. That's correct.
"Q. What is the size of the chart?
"A. Fourteen or sixteen inches across.
"Q. What is the capacity of the scale?
"A. Well, the largest I have seen, I understand they make them larger, but the largest I have seen that I remember of is forty pounds.
"Q. What are the divisions of weight?
1265 "A. I don't remember the divisions of weight.
"Q. How close can you weigh on it, to half a pound or quarter of a pound or what?
"A. Yes, you can weigh to half a pound and to a quarter of a pound. I think that it is graduated to two ounces although I am not absolutely clear on that, on the forty pound capacity.
"Q. What is the range of prices per pound?
"A. I don't remember the range of prices. We are using in connection with the same scale various ranges of prices the way I understand it, depending on what the customer may want, some

selling a commodity that requires a high price and some a low price per pound, so the price range is made to suit the customer usually.

"Q. You have certain fixed styles of prices per pound. Now, take this forty pound scale. How many different arrangements of prices per pound have you for that scale?

"A. I have no idea.

"Q. You don't know?

"A. No.

"Q. As you go from one pound up to forty pounds at any place on the scale do you require any change in the scale to accommodate the scale to higher prices per pound?

"A. With the arrangement we have on that scale it is possible to get a great range of prices per pound because we can turn the indicating hand over which doubles the range of prices.

"Q. That's your turned over indicator hand, and when you turn it over you have red figures on the other side, is that it?

"A. Yes, we have red figures on one side.

"Mr. Zane: That's all, the same old thing.

Redirect examination.

By Mr. Meads:

"Q. Mr. Hem, what is the capacity of the scale having the greatest capacity that you know of that the Toledo Company makes of a purely automatic character?

"A. From nothing to forty pounds.

"Q. I mean mechanically.

"A. No, absolutely automatic without any manipulation at all, it is automatic from nothing to forty pounds.

"Q. Then why did you answer counsel as you did just now?

1266 "A. Counsel switched his question so as to get such an answer.

"Mr. Zane: Move to strike out his statement that I switches any question around.

"Mr. Meads: I want to get the facts. It is evident either I misunderstand him or you.

"Q. Mr. Hem, in a scale of forty pound capacity is any manual change in the scale necessary before you get the computations for forty pounds?

"A. It is not.

"Q. Well, explain what you meant then when you testified to counsel, in reply to counsel's question that it was the same old scale, shifting the red to the black?

"A. The shifting simply gives the greater range in values per pound. With a shift or turn of that indicator hand it enables us to double the range of prices, so that is the only thing that you do if you want such a great range of prices; if you don't need it, then

there is absolutely nothing to do with the scale, it is automatic from nothing to the full capacity of the scale.

"Q. So that unless you wish to double the range of prices you make scales that are absolutely automatic up to forty pounds, is that right?

"A. That's correct.

"Q. That requires no manual change to the scale?

"A. Absolutely nothing.

"Q. Now, turning to your substitutes which you have mentioned of a dial for the cylinder in scales such as Complainant's Exhibit of Defendant's Scale and Defendant's Exhibit 55, what is the capacity in pounds of the Defendant's Exhibit 55?

"A. Thirty pounds.

"Q. In your testimony as to making a substitute for the cylinder in such a scale, by putting on the working mechanism of the scale other than the cylinder a dial, is it possible to make the capacity of that dial thirty pounds?

"A. Yes, sir.

"Q. With computations for value?

"A. Yes.

"Q. In order to get the same space in which to place your value graduations for thirty pounds at the higher prices per pound as compared with Defendant's Exhibit 55, what would be the diameter of such a scale?

1267 "A. The diameter of the dial for the purpose of getting the same spacing between the graduations of the same capacity, the dial at the point where those graduations would be, would have to be identically the same diameter as that cylinder, but in making a chart it would necessarily be made larger so as to have the computation at the same diameter and the weight indications would be on the larger diameter.

"Q. Will you tell the circumstance of this cylinder?

"A. Not knowing exactly the diameter——

"Q. Substantially.

"A. —of the chart, if it is eight inches in diameter it is substantially twenty-five and one-eighth in circumference.

"Q. Now, in order to accommodate value computations on your dial chart in conformity with the computations on this particular chart, twenty-five inches in circumference, what would be the size of your dial?

"A. To get the graduations the same distance apart it would be the same diameter.

"Q. Is that mechanically difficult, would it be mechanically difficult?

"A. No.

"Mr. Meads: That's all.

"Mr. Zane: That's all.

Then testimony as follows:

Mr. Meads: If the Court please, when we were at Toledo there was an instrument of assignment which Mr. Theobald was unable

to recollect as to whether the signatures of the parties were on it, which we attempted to prove by Mr. Theobald, and he said he didn't remember whether the signature of Mr. Rakestraw was on the original, the copy of which we have, so we have sent to Washington and got a certified copy—it is the assignment from the DeVilbiss Computing Scale Company to the Toledo Scale and Cash Register Company under date of July 15, 1900—of certain patents and applications, a certified copy of it from the Patent Office in Washington under date of April 10, 1917, which I now offer in evidence.

Mr. Zane: What is the number of the exhibit?

Mr. Meads: Why, Mr. Theobald said he didn't remember whether the signatures were on the original and we didn't attempt to offer it; we asked him and he said he didn't remember so we sent to Washington and got the certified copy.

1268 The Master: As far as that is concerned, I understand that a certified copy is competent anyway.

Mr. Zane: We object to it, your Honor, as not admissible under any of the issues upon this accounting, and so far as I can see it does not refer to anything that has yet been offered in evidence as a patent.

Mr. Meads: It specifically covers some of the exhibits offered in evidence if the court please.

The Master: Objection overruled.

(Said certified copy of assignment from the DeVilbiss Computing Scale Company to the Toledo Scale and Cash Register Company, dated July 15, 1900, so offered, received in evidence and marked Defendant's Exhibit 64.

CHARLES A. JOHNSON, a witness called on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I am 30 years of age and live in Toledo, being employed as the head of the Service Department of the Toledo Scale Company, which position I have held since the summer of 1910. Before that I was in the Accounting Department for about two years, and in the Collection Department for a few weeks, and then was employed for about two years in the Auditing Department. I entered the employ of the Toledo Scale Company in June, 19-6.

"I produce a book entitled, 'Toledo Computing Scale Company, Toledo, Ohio, U. S. A. Record of Sales, Sample Cases and Supplies Received,' which contains, as it states, a record of the various scales, sample cases and supplies received at the factory. This book has been kept in my department and under my supervision since I entered that department in the summer of 1910. One of the entries in this book, for example appears, September 1, 1911, and in the column headed by the word, 'Disposition' appears the letters 'Stk.' This is an abbreviation for the word 'stock.' In some cases through the book the word 'Stock' is spelled out, but means the same as the

abbreviation, 'Stk.' This shows the disposition of the scale after it was returned, that is, it went into stock, which means that we have looked up the history of that scale and found it to be the property of the company, so that it can be disposed from stock as we see
1269 fit. Sometimes, under this column marked, 'Disposition,' will appear the word 'Repair' and, in a few cases, you will find the word 'Hold.' The word 'Repair' would mean that the scale was received from the customer to be repaired, while the word 'Hold' would mean that the scale was simply being held until we can determine its ultimate disposition by further investigation."

Cross-examination.

By Mr. Zane:

"This book has been kept under my supervision. I cannot say positively in whose handwriting are the entries on the first page of this book. The pages of the book are divided into columns—the first column showing the scale number—the serial number of the scale.

"The second column shows the style number of the scale.

"The third column shows the finish of the scale, if it is a Toledo scale, and the make of the scale if it was a scale of some other company's make. Thus, in some of the entries you will notice the word 'Day' which means that it is a Dayton scale, that is, one manufactured by the Computing Scale Company of Dayton, Ohio, the plaintiff in this action. The letter 'B' in this column would indicate blue finish, that is, a blue finish Toledo scale. The abbreviation 'Day Plat.' would indicate that it was a Dayton platform scale.

"The next column is headed 'Via,' and in that column is entered the initials of the railroad over which the scale has been shipped.

"The next column is headed, 'Received,' and in that column is entered the name of the person from whom the scale is received.

"Under the next column, headed 'From' is entered the place from which the scale is received.

"The next column is headed, 'Date,' and in that column is entered the date on which the scale was received.

"Under the next column, headed, 'Consecutive No.' is entered a pro-number for the receiving scale so that we can readily refer back to it. The scales received are given a number in consecutive order and that is called the receiving number of the scale. This book starts with the consecutive number, 100.

1270 "Under the next column, marked 'Disposition' is entered what is done with the scale, that is, put into stock, etc. The first entry in this column is a ditto mark, which, of course, is a mistake there, though, because most of the scales are put into stock, that word is usually dittoed. This ditto means that the scale was put into stock. I have not with me the book before this one. It is over in Mr. Meads' office and we can bring it over, if you desire it. I am very sure, however, that this ditto mark stands for the word 'stock,' as we do not put down a ditto mark on the 'repairs' or 'holds.'

"The first entry in this book shows the name from whom the scale

is received to be J. F. Eyster, El Paso, Texas. That is a customer, I think. There were two scales received from Mr. Eyster—both Dayton scales—and the disposition of them was into stock. I know that these were scales that were sent in exchange for some other scales. The next entry shows Burch & Tripp, Coldwater, Michigan—a Toledo blue scale. This scale was from a customer, and I cannot tell from that record just what disposition was made of it. The next entry there shows the receipt of certain scales and a sample case from F. Schatz, of Erie, Pennsylvania. Mr. Schatz was an agent, one of our salesmen. I cannot tell what was done with these scales, as they were possibly sample scales. From this book I cannot tell on Toledo scales whether it is a scale taken back by the company or a scale taken in exchange on a new sale.

"Another column is headed 'Condition Received In,' and under that column one entry shows the figures 'L 495/28.' This would be the pro-number of the expense bill on which that scale was received, and under the next column headed, 'Date Completed,' is entered the figure $5.33, which would cover the amount of the expense bill.

"Referring now to the entry of the scale No. 76964, blue finish, received via Lake Shore & Michigan Southern, from F. Schatz, Erie, Pa., the disposition of that scale was that it went into stock, but what became of it after that, I cannot tell. That record simply shows that the scale is our property and just what eventually became of it, I could not tell you. The figures 'E 727/17' show the pro-number of the expense bill or the freight bill that accompanies this scale.

We paid the freight on this shipment. We sometimes pay the
1271 freight on customers' scales sent in, and sometimes we do not.

The figures under the column, 'Date Received,' show the freight or express paid. There are no figures in this column that show the cost of repairs.

"The 'stock' disposition is made of scales that are received back in cancellation of an account, as well as on scales taken in exchange. This record would show under the appropriate headings the descriptions of every scale received at the Toledo factory during the time that this book covers.

"On a page marked 'Number Plates Only,' that entry means that only the number plates of the scales were sent—the scales themselves being junked at the branch office from which the plates were sent. These scales were simply junked or destroyed at the branch office. They were simply broken up there. I know that we have destroyed a great many of Dayton scales that were taken in exchange. On this particular page where number plates only are given I see no entry for other than Dayton scale. On the next page there is an entry of an automatic hanging which means that the number plate only, of the automatic hanging scale was received. I know that that scale was not a Dayton scale, for if it were it would be so marked. I don't know who made the entry. I did not. Where the entry is 'without number plates' I can't recall what that would be, although this book was kept under my supervision and direction. I don't think there is anybody who can tell. I can't explain the entry.

The same clerk that I spoke of before made these entries, as well as the others. The next page has 'Number plates only,' and the next page has 'Number plates only.' If the plate is taken from a Dayton scale it is marked 'Dayton.' The scale known as the Boston Butcher scale is a type of Dayton scale known as the Boston Butcher. I note one entry on this page that is marked 'Number plate only, Boston Butcher.' I don't know why that was entered that way. The whole page is marked 'Number plates only.' So is the next page. They are all Daytons.

"I gave instructions covering how to make the entries in this book, and he had the page there before him.

"When I see a page on which there are many entries but no indications where they were from, I would say that the clerk forgot to carry his ditto marks when making the entries.

1272 "On the pages marked 'Number plates only,' there are 24 entries of scales on each page of the book, though it may not refer to 24 scales on each page, because there are a few entries which may refer to sample cases, platters, or other material. In the month of December, 1910, there are 11½ pages marked 'Number Plates Only,' but some of these notations show 'Tags Without Number Plates,' which would mean that a tag had been sent in showing the number of the scale, and the party from whom it was taken, etc., but the number plate, as well as the scale itself, had been destroyed. Other entries show 'Number Plates Only Without Tags,' which means that the tags did not accompany the number plates. Where the entries are 'Number Plates Only,' it means that the scale itself was not sent in, but it does not necessarily mean that the tag is not with the number plate. I could not tell from those entries whether the tag accompanies the number plate or not, but in those entries marked 'Number Plates Only Without Tags,' it is clear that the tags did not accompany the number plates, and similarly, the entries 'Tags Without Plates' clearly indicate tags sent in without number plates. These 12 pages of December, 1910, are all marked December 7 or December 8, and show cases where no scales were sent in, but either the plate or the tag were sent in, showing that the scale was destroyed. One entry shows that plates were sent by J. M. Hopkins, an agent, from our Boston Office. There is no marking on some of these entries under the head 'disposition,' which means that the clerk started the ditto for 'stock' but it was not carried through. None of the scales marked 'Number plates only' were received at the factory. These scales not received at the factory with the word 'stock' marked as ditto, does not mean that they went into stock, but were the property of the company to dispose of or break up, or whatever they wanted to. In these cases of 'Number Plates Only,' marked 'Stock' the scales were already broken up before coming to the factory. On the first of these pages is shown the entry of a scale No. 208, style 61, Dayton, received via Lake Shore Railroad, from the Boston Office, on December 10th, 1910, the consecutive number of which is 338, and in the column marked 'Disposition,' there is no entry. Further down the page is the entry of a scale No. 75810,

style No. 61, ditto for Dayton, received via ditto, for Lake
1273 Shore, from ditto, for Boston Office, ditto for Boston, Massachusetts, and with the date December 7th, 1910, and under the heading 'Disposition' is marked a ditto. This ditto means 'stock.' The only way I can account for the difference in the entries in the 'Disposition' column is that all these entries being under, 'Number Plates Only,' we would understand that it was 'stock.' I don't believe there are any cases where agents send in number plates only. That was done only by the company offices. The entry there 'Tags without number plates' means tags without number plates, but it does not say that.

(Said pages were then marked for identification, Plaintiff's Exhibits 62, 62*a*, to 62*k*, and were then offered in evidence and admitted over objection of counsel for defendant.) Said entries show what is stated in the testimony.

"If a scale is sent in by a customer for repair it would show the word 'repair' under the column marked, 'Disposition,' and if the name of the salesman appears in this entry it would indicate that the salesman took care of the shipping of this scale in behalf of the customer. There is one entry here showing a scale sent in for repair by J. W. Harris of Genoa, Ohio, one of our salesmen. These repair entries indicate that the scale does not belong to the company.

"Where you see nothing at all in the 'Disposition' column—neither a word nor a ditto mark—it might mean that the scale was being held for some undetermined purpose and the word 'hold' had not been written in. There is an entry here under date of November 29th, 1910, showing two scales received from George Smith & Son, Lawrenceville, Illinois. One has, under the heading of 'Disposition' the word 'stock,' and the other has, under the head of 'Disposition' no entry at all—that would mean that one of the scales was our property and there was some question about the other scale. The other is shown to be a Toledo scale and we paid the freight bill on this entry of $1.68. Since there is no number of the freight bill marked in the column on one of these entries, I assume that the scales were sent in one shipment, and the freight payment of $1.68 covers the freight on both scales. So far as the entry shows that scale might have been a repossessed scale.

1274 I have seen scales dismantled and parts thrown in different places, iron, brass, etc. I have seen a bunch of them piled up as scrap.

"Under the column 'Condition received in' in this book, we did not enter a statement of the condition in which the scale was received, though occasionally you find such notations as 'Short a platter,' or something like that. You would not find any entry of that kind except by chance. There is one entry here showing 'Base and housing broken.' I would say that entry is just there by chance In other places I find entries of 'Lever and sub-base broken', 'Spider broken', 'lever broken', etc. These entries are in December, 1910, in the handwriting of a man named Saxton. I do not know

just where he is now, as I have not heard from him for a couple of years. He put them in there of his own accord, this column is supposed to be for the pro-number.

"We repair customers' scales, but only Toledo Scales, unless we had made the sale of a scale of other makes. On the page to which you have directed my attention, there is an entry showing that on January 5th, 1911, a blue finish scale was received from Schrauder & Co. of Monroe, Mich., via the Detroit Electric Railroad, and under the head marked 'Disposition' is the word 'repair'. That is from a customer. Further down on the same page is an entry of a Dayton platform scale received from our New Orleans Office, via the C. H. & D. railroad, and in the column marked 'Disposition' are ditto marks, while there are no words in this column between the ditto marks and the word 'repair' above. I think this ditto mark is an abbreviation for the word 'stock', and does not mean that this Dayton scale was repaired."

(This page was here marked for identification, Plaintiff's Exhibit No. 63, and admitted in evidence. These entries show what is stated in the evidence.)

"I notice that after the first of January, 1911, under the column 'Condition Received In', are numerous entries showing such entries as 'Lever, housing and platter broken', or 'Base spider and lever broken'. I do not remember issuing any instructions to change the former system of entering in this column only the pro-number of the expense bill. This entry was made by the clerk of his own accord. I see on one of these pages notations, '50 blue re-
1275 flectors broken', and another of '23 gold reflectors broken'. This means that the mirrors or reflectors for these blue or gold scales were broken—either the glass itself being broken or the frame being bent or crushed. These were shipments from our New Orleans Office.

"In one of the entries in this book appears, under the head 'Date Completed', the words 'free astray'. My understanding of this entry is that it is the term used to indicate that the shipment was delivered without billing, just a memorandum form used in that case.

"Under the head 'Disposition' the entry of 'Deliver to A. D. V.' means that the scale was delivered to Allen De Vilbiss. I do not know under what circumstances. The next ten items show ten scales sent by various people, and under the head 'Disposition' have ditto marks. I do not believe the ditto marks below 'Delivered to A. D. V.' means that all of these scales were delivered to Mr. De Vilbiss. I think the ditto marks mean that the scales were put into 'Stocks'. On the next page these entries 'Delivered to A. D. V.' were made by Mr. Saxton. I notice ditto marks for five scales under 'De Vilbiss', but I do not know in that case that the ditto marks mean 'Stock'. The entry 'Style 61, Day' means Dayton. 'Exch.' might mean exchange, but I don't know what the word means.

"In the month of February, 1911, I see one entry showing a blue scale marked 'Repair' under 'Disposition', and below that the next

scale is a No. 63 Dayton scale sent in from the New York Office, and under the head of 'Disposition' is marked the word 'Repair' by ditto marks. Below that is an entry Hartong in which the word 'Repair' is written in, and below that a scale marked 'Stock', not by ditto marks, but written out. On the preceding page are two other instances of where after the word 'Repair' the word 'Stock' or 'Stk.' is written in and the ditto marks not used. Where the change is made 'Stock' is written in, not ditto marks.

"When I see on this page, under the column 'Disposition', I see opposite one scale the word 'Repair', and for the scale immediately below that a ditto mark, then for the scale below that the entry 'Stk.'; then for the next scale below that 'Repair', and then for the next scale below that 'Stock', written, I think that you will
1276 find in this work by Mr. Saxton. He was a little more thorough after he had been at work for a while. This is in March, 1911. Where you see the word 'Returned' in the column under 'Disposition', it means that the scale was sent back to the sender. When you see, under the head of 'Disposition' the entry, 'Brought over from main factory', it means that the scales were brought from the main factory over to our receiving room.

"In the month of March, 1911, there are 10½ pages marked with certain scales entered under the heading 'Name Plate'. These are scales of the same description where the name plate only was sent in, and the rest of the scale destroyed. On each line of these pages is entered the number of a scale, except in one case, I note the entry of a sample case received. Every other line is filled in with scales.

"Under date of February 15, 1912, there is an entry of a scale No. R-3948, style No. 61, Dayton, via Lake Shore received from A. Svoboda, Schenectady, New York, consecutive No. 7101, and under the column marked 'Disposition' the word 'Repair'. This is an instance where we repaired a Dayton scale, but it was a scale that we had sold—the letter R before the serial number indicating that it is a rebuilt scale. We have rebuilt or put in working order different kinds of scales, including Dayton, Angldile scales, etc. I see a notation of certain entries in the month of January, 1912, showing in the column headed 'Disposition' the words, 'stk. repair'. I can't say just what this means. These entries were made by Mr. Saxton. The scale number is 279,360. It is not our number. It is a Dayton Scale. The next two scales are Daytons and are also marked 'Stock repair'. I can't say what he means by that notation. I see another entry in December, 1911, of a scale No. 179,398, style No. 63, Dayton, received from Eggleston & Shurter, Ithaca, New York, consecutive No. 6193, disposition, repair. This is possibly a scale that was fixed up out in the field by one of our men and sent to that customer.

"Another scale, Dayton No. 243,709, which is not our number, Style 144, finish Dayton, received from J. D. Foost, Jr., Rochester, is marked 'Stock repair'. I can't explain it. Possibly it is marked only 'Repair'. The scales have different pro-numbers and
1277 different expense bills. Another scale received Nov. 24, 1911, Dayton, from Frank Lowe, East Liverpool, Ohio, is

marked only 'Repair', and there is another Dayton received November 1, 1910, No. 215,715, Style 63, Dayton, marked 'Repair'. October 19, 1911, are Dayton scales built over by us marked 'Stock repair' in one case, and 'repair' in the other case. There is another Dayton scale received from Dalton, No. 216,875, marked 'Stock repair'.

Redirect examination.

By Mr. Meads:

"On the first page of this receiving book in the column marked 'Deposition,' the first two entries have ditto marks, the next item is blank, and following that are ten items with ditto marks in this column. These ditto marks indicate 'stock', though the word 'stock' does not appear in any of those items."

(The 10½ pages referred to on cross examination, being the pages marked August 4, 1911, were here offered and received in evidence, and marked, Defendant's Exhibit No. 65, 65*a* to 65*i*, inclusive.)

JOHN L. THEOBALD, a witness on behalf of defendant, testified as follows:

Direct examination.

By Mr. Meads:

"I live in Philadelphia and am the eastern representative of the Toledo Scale Company, having been connected with this company since January, 1908. When first employed by this company I was placed in charge of the Pacific Slope selling district, with headquarters at San Francisco—the Pacific Slope territory including all territory from Denver, Colorado, west to the coast, and from Canada to Mexico.

"I stayed in this position until July 4th, 1908, when I was placed as District Manager for the selling district consisting of the states of Ohio, Kentucky and the greater portion of West Virginia. I became sick in December of 1908 and was away from the company for some time. On my return I was placed in charge of the New York selling district, beginning in February of 1912, and continued in
1278 charge of the New York district until the 22nd of September, 9115. Since that time I have been District Manager of the Philadelphia district, with my headquarters at Philadelphia.

"While I was operating out of San Francisco I was called upon to personally sell scales and also to go out with the salesmen in the sale of scales in the field.

"I know the talking points that were used by me and the salesmen when I was present in the sale of scales in the field."

Then testimony as follows:

Q. Do you know what talking points, if any, were used by you and the salesmen when you were present in the sale of scales in the field?

Mr. Zane: Wait. We object to that as incompetent, irrelevant and immaterial.

Mr. Meads: I am taking the words from the case in the 216 Federal Reporter, Herman vs. Youngstown Car Manufacturing Company.

The Master: Have you an authority on the subject, Mr. Meads?

Mr. Meads: Yes, I am reading now from page 607, Herman vs. Youngstown Car Manufacturing Company, 216 Federal Reporter.

(Reading.)

The Master: I don't think it is competent.

Mr. Meads:

Q. In those cases, Mr. Theobald, in which you had personal knowledge from either the sale by yourself or by actual attendance when sales were made do you know what inducements or statements were made as to the Toledo scales to induce such sales?

Mr. Zane: We object to that as calling for a conclusion and as incompetent, immaterial and irrelevant.

The Master: He may answer that question yes or no.

A. Yes, sir.

Mr. Meads:

Q. Now, confining yourself entirely to matters within your own knowledge, what was the inducement, if any, which you know was used to sell the Toledo scales?

Mr. Zane: We object as incompetent, irrelevant and immaterial, as asking for the conclusion of the witness.

The Master: Objection sustained.

Mr. Meads:

Q. Do you know what statements were made by you or any one in your presence to sell the Toledo scales of which you had personal knowledge?

1279 Mr. Zane: We object as calling for a conclusion.

The Master: Objection overruled.

Mr. Zane: If your Honor please, he says "Do you know what statements were made to sell", that's the conclusion; that's a conclusion.

The Master: This is a question that can be answered yes or no; you may answer whether you did or not.

A. I did, yes.

Mr. Meads: Will you tell the court what such statements were?

Mr. Zane: Now, we object to that as irrelevant and immaterial and incompetent.

The Master: Objection sustained.

Mr. Meads:

Q. Do you know what representations were made by you or by any one in your presence in an endeavor to sell Toledo scales?

A. Yes, sir.

Q. Now, confining your self to such representations as those of which you have personal knowledge, will you tell the court what representations were made?

Mr. Zane: Same objection.

The Master: Objection sustained.

Mr. Meads: Of course, I suppose it goes without saying there will be an exception to all the rulings of the court, to all these rulings?

The Master: Yes. I am not sure but the testimony on that point is incompetent. I have not made up my mind on that question, they call for conclusions.

Mr. Meads: No, I am asking exactly what was said, your Honor. Well, I will put it: In an endeavor to sell any of these scales will you tell the court what you or any one said in your presence?

Mr. Zane: We object to that, if your Honor please; it seems to me that the authority which he cited here does not go to the question of evidence at all. The court in the course of its argument there is using the term "talking point" not with reference as to the kind of evidence that's admissible. Now, think of what the issue is upon a collateral proposition of this kind, each sale is one by itself. What was said at a particular selling of a scale then becomes an issue, this man testifies as to something he heard said and then somebody else would be competent to testify as to what he heard said, but
1280 the point has no tendency to show anything in regard to the bargain with, or the inducement to the bargain, that's all matter of argument, what was the inducement that caused the sale to be made. In other words, it is such speculative testimony and it can only be taken upon the ground as to what was in the mind of the purchaser, and what was in the mind of the purchaser this witness could not testify, nobody could testify, unless the intention of the purchaser was in question and then he might testify to his intention himself, but here the proposition is not his intention, here it is what caused that purchaser to make up his mind to buy that scale. Now, think of trying to prove that by testimony of this kind, that's the reason we object.

Mr. Meads: The first thing you would have to determine as to whether the purchaser used any part to make up his mind is what the purchaser had to consider.

(Discussion.)

Mr. Zane: Outside of that, of course, the whole thing is incompetent and immaterial here.

The Master: Of course, no witness can tell what argument may or may not have induced a purchaser to buy, he can only judge that from something that the purchaser said or from some conduct on his part, that I don't believe would be competent evidence. It puts it in the power of one witness to put his construction upon what effect certain language has. Now, the only question that I am in any doubt about is this: whether or not as tending to prove or as one step in proving that some other element than the patented element contributed to the sale. Specific conversations might be given confined to a specific sale and in that way show what was said to a purchaser to induce him to purchase and then leave it for the court to determine whether it did induce him to purchase or whether it didn't.

Mr. Meads: He could tell one part, he could tell what representations were made to the purchaser and then let the court determine whether that produced the sale.

The Master: I think that's as far as you would possibly have a right to go and I am not entirely satisfied about that.

(Pending question read at direction of Master as follows: In an endeavor to sell any of these scales will you tell the court what you or any one said in your presence?)

1281 The Master: At how many specific sales were you ever present?

A. I could not tell you that, a great many.

The Master: About?

A. I could not answer approximately correct.

The Master: Twenty-five?

A. More than that, but I would not want to specify because I could not state, I am here to tell what I know and not to guess at anything and I would have to guess at how many sales I was present at, more than a hundred a great many more.

The Master: I will sustain the objection.

Mr. Meads:

Q. What features, if any, of the scale known as the Toledo platform scale were called to the attention of customers by you?

Mr. Zane: The first objection to that question is he says Toledo platform scales. They had a fan scale which was a platform scale, they had a cylinder scale which was a platform scale. The fan scale is not in question here at all. I first object to it because it is too general, secondarily I object because to ask here the general question what features were drawn to the attention of a purchaser, it is just simply another way of getting in conversations only this enables the witness to put his construction on a whole lot of conversations and to state what the matters were that might have been spoken of in different conversations; it calls for the baldest kind of a conclusion.

Mr. Meads: The word "features" of course your Honor understands means elements, what elements.

The Master: Objection sustained.

Mr. Meads:

Q. Did you call the attention of any customer of a Toledo platform cylinder scale to any features of such scale?

Mr. Zane: Same objection.
The Master: Objection sustained.

Mr. Meads:

Q. Did any one of your salesmen in your presence say anything to a prospective customer concerning the elements in a Toledo platform cylinder scale?

Mr. Zane: Same objection.
The Master: Objection sustained.

Mr. Meads:

Q. Do you know of your own knowledge what inducements or representations were made to any customers who bought the
1282 Toledo platform cylinder computing scale in an endeavor to have such prospective customer buy such scale?

A. Yes, sir.

Q. Will you give the court the substance of what was so represented to such prospective customer in any particular case, giving the time and place?

Mr. Zane: Same objection.
The Master: Objection sustained.

Mr. Meads:

Q. Mr. Theobald what statement did you make, if any, to any prospective customer for a Toledo platform cylinder scale in an endeavor to induce him to purchase such scale?

Mr. Zane: Same objection.
The Master: Objection sustained.

"In the sale of Toledo Cylinder scales, the term 'allowances, refers to the amount which we allowed for an exchange scale which a customer might have on his counter in part payment for a Toledo scale which we might sell him.

"I was in court this morning during the testimony of Mr. Johnson as to certain scales marked 'stock' where merely the name plate or the tag were sent to the Toledo factory. I personally know of instances where the name plate was preserved by myself and the scale destroyed in the New York office. In such cases, allowances had been made for the scale destroyed.

"Q. Will you tell the court why allowances were made by you for the scale if the scale was destroyed?

"A. Because we were forced to make allowances for these scales to meet competition and they very often allowed an excessive price

for the scale and very often allowed an exchange allowance where a scale didn't exist."

Then testimony as follows:

Mr. Zane: We move to strike out his answer as stating a conclusion.

Mr. Meads: Not if he knows.

Mr. Zane: He says we were forced to do it to meet the competition, that states a conclusion.

Mr. Meads: It states a condition. If people who were selling about him made allowances for scales which did not exist, that is not a conclusion, it is a statement of a condition if he knows.

1283 The Master: Motion denied. The question was not objected to.

Mr. Zane: If your Honor will go back to the question, it could not be indicated he would make an incompetent answer.

(Question read.)

Mr. Zane: You see why. That does not give us any idea he will answer by a conclusion. He says they were compelled to do it to meet competition, but he might conceivably answer something that would be competent, hence I could not object to that question. I say that purely in answer to your Honor's suggestion that we didn't object.

Mr. Meads: Here is a man that has sold scales from San Francisco to New York and knows the condition of the market and he says his competitors made allowances even where they did not exist.

(Further discussion.)

(Question and part of answer read as follows:

Q. Will you tell the court why allowances were made by you for the scale if the scale was destroyed?

A. Because we were forced to make allowances for these scales to meet competition.)

The Master: To that point the motion will be denied. As to the remainder of the answer it may be stricken.

Mr. Meads:

Q. Now, Mr. Theobald, if you know what was the competition.

Mr. Zane: We object to that as calling for his conclusion.

The Master: Objection sustained.

Mr. Meads:

Q. What do you mean when you say we did it to meet competition?

Mr. Zane: We object to that.

The Master: Objection sustained.

Mr. Meads:

Q. What was the competition which you met by so doing?

Mr. Zane: Same objection.
The Master: Objection sustained.
Mr. Meads: When you say competition, competition of whom?

A. Competition of other computing scale manufacturers.

Q. What, if anything, in the conduct of such scale manu-
1284 facturers to your knowledge was done to warrant this action on your part?

Mr. Zane: We object to that as calling for his conclusion. I can't conceive of a worse question than that.
The Master: I think I know what counsel are driving at. I think they would have a right to show that other dealers manufacturers and dealers in scales had adopted a practice that they had to follow in order to meet their competition that is, that other scale manufacturers were taking used scales in exchange and allowing perhaps more for them than they would be able to realize.
Mr. Meads: I just asked him what was done, if your Honor please.
The Master: You may answer that question, and if the answer is competent, I will let it stand; if not, I will strike it out physically.

(Question read.)

A. That would occur just as I started before, excessive prices for scales that were on the counter in use and very often cases where there was no scale in evidence, an inflation of price to begin with enabled them to do this in my estimation, and to meet that competition I was forced to take such scales as I found on the merchant's counter and make him an allowance which was prescribed by our company for that particular type of scale as part payment of the purchase price of a Toledo springless scale.

Mr. Zane: I move to strike out his answer as incompetent and as stating a conclusion and as otherwise irrelevant and immaterial.
The Master: Well, I will deny the motion.

Mr. Meads:

Q. What manufacturers, if any, do you know who did what you have said they did in your last answer?

Mr. Zane: We object, if your Honor please. Here is a man that is asked to testify as the circumstances show, and as his last answer shows, he is testifying to something out of his presence that he infers or guesses at from what he heard. Now then, assuming the Master is correct in the rule, the fact is it is competition and it is immaterial as to whom it comes from. It may be from one dealer or it may be from another, but the fact of competition under the ruling as I understand it is competent, but it can't be relevant
1285 or material who were the particular individuals in that com-

petition because he has already stated it was to the other sellers of computing scales.

Mr. Meads: If your Honor please, here is competition. It is certainly competent to show by the witness he knows what he is talking about when he says competition and tell- the court who the competitors are. It might not mean anything if he merely said competition without showing who the competitors were; this question is who were the competitors.

Mr. Zane: He has already said the other computing scale companies. Here is the point, your Honor, you can see perfectly plain what it is they are trying to get at, they are trying to charge that the complainant was selling scales in this way. No doubt the witness will swear to it, I suppose the counsel knows from asking the question what the witness will swear to, but that introduces another collateral issue in the case where we must go into evidence to meet it if it is material or relevant.

Mr. Meads: It may be the complainant or may be half a dozen others, I don't know.

Mr. Zane: He said other computing scale companies.

The Master: I will overrule the objection.

A. The Dayton Moneyweight Scale Company.

Mr. Zane: We object and move to strike out his answer, there is not any such company.

Mr. Meads: That's no reason for striking it out.

The Master: Motion denied.

The Witness: Do you want to go back now—to what period, up to date?

Mr. Meads:

Q. Well, beginning in 1908, when you started, to August 31, 1912.

A. Dayton Moneyweight Scale Company, the Standard Scale Company, Anglidile Scale Company, the Anderson Scale Company, the Stimpson Scale Company and possibly some others. All the companies mentioned were selling computing automatic scales.

"Mr. Meads:

Q. Is the company which you have called the Dayton Moneyweight Scale Company known by any other name to your knowledge?

A. Yes, sir, it is known, I believe, at the present time as the Recording——

Mr. Meads:

Q. Not at the present, up to August 31, 1912.

1286 A. It was originally known as the Dayton Scale Company and later on the Moneyweight Scale Company was organized in Chicago as a selling company and they sold, as I understand, in certain portions of the United States.

"Mr. Zane: Now, we move to strike out what he understands and we object to it all as the baldest kind of hearsay.

"The Master: I am assuming that the witness is testifying from his own knowledge; I of course don't know anything about that, you will have to find out on cross examination.

"Mr. Zane: I think it ought to be made to appear, before he is allowed to testify to any such thing, that he does know something about it.

"Mr. Meads:

"Q. Mr. Theobald, in those cases in which you say that you merely preserved the name plates what, if anything, was done with those plates?

"A. I kept them, the plates of the scales which I destroyed, in the New York agency, I would break them up——

"Q. No, what was done with the plates?

"A. I retained the plates, I put them on a wire, I had a piece of telegraph wire and I would take a plate and I would string it on there to keep as a matter of record; eventually all of those to be shipped to Toledo.

"Q. Well, the plates were eventually shipped to Toledo, were they, Mr. Theobald?

"A. As far as I know.

"Q. And in those cases only the plates were shipped to Toledo, is that correct?

"A. Yes, sir.

"Q. In each of those cases had been made up allowance for the scale in question?

"A. Yes, sir.

"Mr. Meads: Take the witness."

Cross-examination.

By Mr. Zane:

"I am a brother of Mr. Henry Theobald. Before I was employed by the Toledo Computing Scale Company I was County Recorder of Montgomery County, Ohio. Before that I was General Superintendent of the Reynolds & Reynolds Manufacturing Company of Dayton, Ohio, where I was employed in two periods, some-
1287 thing like eighteen years. I started with them pushing a truck, and in three years I was made general superintendent. In 1889, while still in the employ of Reynolds & Reynolds, I had, as a side line, a sales agency with F. G. Kindel, deceased, of Dayton, Ohio, and we had a selling agency for the Dayton Scale Company in Western Ohio, Indiana and Southern Illinois. We had men on the road at our expense. This was in 1889 and continued only a short time. I then went with the National Cash Register Company as special representative, being employed by them in New York City, Philadelphia, Baltimore, Washington and Chicago, and then

returned to Dayton, Ohio, where I was placed in their factory to supervise and construct and perfect their total adding register. I went back to work for Reynolds in June, 1892, and worked for them until March, 1901. Then I was County Recorder for Montgomery County, Ohio, for six years, and then went to work for my brother. I was never present at a sale by the Standard Company.

"I personally sold Toledo Scales where the Angldile salesmen tried to sell, but the other selesman was not personally present when I made the sale. I was not present when any sale was made by the Angldile Company to a scale purchaser. I was always fighting them in competition, and was very glad of this competition, as it gave me an opportunity of showing the superior merits of the Toledo product. I would not be able to say now whether I was ever present at the transaction between the representative of the Anderson Scale Company and a scale purchaser, nor of a transaction between a representative of the Stimpson Scale Company and a scale purchaser. I would have to look back over a great many years, and over many hundreds of sales, so that I hesitate to say that I was ever present at a sale by one of the other companies' representatives. My knowledge of what the Standard and Angldile and other companies' salesmen were doing came from what was told me by the merchants who purchased the scale or by the salesmen for these other companies. This is also true as to the Dayton company's representatives, and I could possibly cite some cases. I was never personally present when anyone representing the Dayton Computing Scale Company made a sale of a computing scale to a pur-
1288 chaser. They never sold one when I was present—I sold the Toledo Scale."

Then testimony as follows:

Q. So that all you know about the transaction in regard to computing scales sold by any of these companies was what was reported to you by the purchaser of the scale or what was reported to you by your salesmen, was it not?

A. Why, absolutely, certainly.

Mr. Zane: Move to strike out all his testimony because all that he has testified in regard to the terms being offered by these other companies, that is, prices and allowances and so on, is something that he was either told by the customer or something he was told by his salesmen.

The Master: What have you to say about that?

Mr. Meads: The answer is very obvious. The best man to tell what he paid for an article would be the man who bought it.

The Master: Well, the motion is to strike out the testimony because it is hearsay.

Mr. Meads: Yes, it is hearsay, in that respect, he knows the action of men because he knows from the individual who did the thing, the man who bought the scale, that he paid a certain price for it.

The Master: Is not that hearsay?

Mr. Meads: To that extent it is hearsay, but that does not take from him the knowledge.

(Discussion.)

The Master: Take his testimony on that question as applied to all the companies that he mentioned, I understand him to say now that he was never present at the transaction, what he knows about it is what somebody told him. Well, that somebody was not under oath.

Mr. Zane: That's the test.

The Master: And the other side had no opportunity to cross-examine him, it was hearsay. Now, how can that be competent if it was purely hearsay as it seems to be now from his answers.

Mr. Zane: What I move to strike out is his testimony in regard to what he was told, that is not competent under any circumstances.

Your Honor stated the test is their coming in evidence by
1289 a statement of one person as to what another person has said, a statement purporting to be of a fact, which statement is not sworn to, that's the test of hearsay. Nobody ever disputed it I take it since the hearsay rule was given in 1685.

The Master: I think the hearsay rule applies to this case. There are cases where the truth or falsity is not concerned and where the question whether somebody acted on a given statement.

Mr. Zane: Oh, yes.

The Master: But this witness made positive statements that these other companies had made certain transactions, it turns out he was not present at any of those transactions. I will sustain the motion.

Mr. Meads: Well, what is stricken out?

Mr. Zane: I move to strike out his testimony regarding the prices and terms of other competitors on the ground that that was what somebody told him.

The Master: I will sustain the motion.

Mr. Zane: That's all.

Redirect Examination.

By Mr. Meads:

"I represented the Dayton Scale Company only a few months in Dayton, Ohio, and we had salesmen in western Ohio, Indiana and southern Illinois. I personally have never sold any of the Dayton barrel shaped computing scales—the kind of scales which I sold were the grocer beam computing scales which had a movable beam, but no cylinder."

Then testimony as follows:

Mr. Meads:

Q. Mr. Theobald, do you know whether in the time in which you were connected with the Toledo Scale Company from 1908 to 1912, August 31st, there was any practice in force among scale companies as to allowance for second-hand scales?

A. Yes.

Q. Do you know what such practice or custom was?
A. Why, they allowed so much on the purchase price for an exchange scale, in part payment.
Q. I have asked you, do you know what such practice was, yes or no?
A. Yes.
Q. What was such practice or custom if you know?
1290 A. They would go in to sell a merchant a scale and then would make him a special offer for the scale which he was using in part payment for the new scale that they attempted to sell.
Q. Do you know whether as a matter of fact such allowance was equal to or greater than the value of such scale?

Mr. Zane: We object as calling for the conclusion of the witness and as not a part of the custom at all. He was starting to prove a practice, a custom. Now, the witness has testified that there was a custom to make allowances for scales taken in exchange. We don't object to that. I would have admitted it, but now he is going into something further and states a custom on the part of somebody to make excessive allowances and something of that kind and we have already been over that question, and what he says he knows about it is what he was told by the customer or by his salesmen.
Mr. Meads: The only way you can prove a custom is by one in the business who knows the custom, any one skilled in the business.
The Master: I don't think this is a matter to be proven by a custom. I think you will have to get at the facts of the particular transaction. It could not have in the nature of things been possible that there would be an unvarying custom as to how much less or how much more might be allowed in a given case than somebody else thought that scale might be worth. Objection sustained.

Mr. Meads:

Q. Mr. Theobald, in these particular scales which you took and in which you preserved only the name plates and on which you had made allowances on purchasing your scales, why did you destroy those scales?

A. Because they were worthless to our company.
Q. What kind of scales were they?
A. The bulk of the cases Dayton Moneyweight scales.
Q. Manufactured by the Computing Scale Company of Dayton?
A. Yes.
Q. When you say they were worthless what do you mean?

Mr. Zane: No, he said "worthless to our company."

1291 Mr. Meads:

Q. When you say worthless what do you mean?
A. I mean they were of no value.

Q. Why?
A. In many cases they were worn out, practically in all the cases, and they had dishonest charts on them.

Mr. Zane: Move to strike out his statement as stating a conclusion.
Mr. Meads: That's his interpretation of the scale. Maybe he is right and maybe he is wrong, he said they were dishonest.
The Master: Well, it may stand.

Mr. Meads:

Q. What kind of charts do they have on them?
A. They had a chart in which the money graduations were placed opposite the even ounces throughout the chart and no money graduations opposite the odd ounces.

Mr. Meads: That's all.

Recross-examination.

By Mr. Zane:

"Q. You know of your company's selling Dayton cylinder computing scales, don't you?
"A. Refinished?
"Q. Yes.
"A. We have sold only chart scales, yes.

"Mr. Zane: Move to strike out his answer as not responsive.
"The Master: The answer may be stricken.

"Mr. Zane:

"Q. Now, answer the question: Your company sold Dayton cylinder computing scales?
"A. With the arithmetically correct charts, yes.
"Q. What you did was to take the scale and put a different chart on it and sell it, that's what you did, is it not?
"A. Yes, sir.
"Q. Now, the chart you speak of in these scales was a chart where the price computations were put in rows opposite the weight of each two ounces, those are the charts?
"A. Which one do you mean, make your question specific.
1292 "Q. The charts you speak of that were in the Dayton scales.
"A. You mean what I called the dishonest chart?
"Q. Yes.
"A. Yes, sir.
"Q. And those computations that were in rows were computations resulting from the multiplying of the weight by the price per pound, and the fraction of a cent wherever one resulted in the computation was disposed of by calling a half cent or more the next higher cent and disregarding a fraction of less than half a cent and calling the result the next lower cent?

"A. I think you have an answer to that in the court proceedings.
"Q. Oh, answer the question. Do you know?
"A. I didn't go into that detail, it is a matter of the court record.
"Q. You don't know?
"A. Exactly what those money values were?

"Mr. Zane: All right, you don't know, so we will not spend any time on that. That's all."

Mr. Meads: Now, if the court please, under the ruling of the court, which I think squarely presents the question, and the exclusion of Mr. Theobald's testimony as to the selling prices on this scale, I think we have nothing further to offer in this case except the depositions which we gave notice of several weeks ago and which Mr. Morse said they could not attend on when we were going to take them at Toledo, with the offer of those depositions we will conclude our case.

The Master: They have not been taken yet?

Mr. Meads: No, absolutely no chance to take them as the court I guess knows. Now, those depositions we will take on some day of next week and then close our case. Defense continued.

Mr. Meads: If the court please, on behalf of the defendant I offer in evidence the depositions taken before George Farnell, Notary Public, at Providence, Rhode Island, on February 21, 1917, on behalf of the defendant, at the taking of which depositions the plaintiff was represented by John M. Zane, Esq., and the defendant by Samuel E. Hibben and Albert H. Meads, pursuant to notice attached to such depositions, and receipt for which is endorsed upon such
1293 notice by the solicitors for the plaintiff, such depositions being those of Thomas Z. Phinney whose deposition is as follows:

Mr. Zane: I want to make the objection here that the deposition was taken wholly without authority and whatever it contains cannot be presented to the Master and cannot be considered as testimony or depositions taken in the case.

Mr. Meads: I had better perhaps finish my offer.

The Master: Well, you got down to the point where you were going to read.

Mr. Meads: Yes, and then outside of the record I said I would read.

The Master: Well, here is an objection to the entire deposition. Other witnesses were taken there, were they not?

Mr. Meads: Oh, yes, the depositions are, as stated, taken at Providence in pursuance of a certain notice, the depositions being of Thomas Z. Phinney and reading as follows:

The Master: Well, suppose you offer all of them so you can bring the whole question up at once.

Mr. Meads: John H. Devlin, Charles H. Tierney, E. Willard Horton, Joseph McNally, Daniel C. Fallon and William H. Gillon, together with the exhibits returned with such depositions and marked by the Commissioner, George Farnell, Notary Public, as Defendant's Providence Exhibit No. 1, Defendant's Providence Exhibit No. 2, De-

fendant's Providence Exhibit No. 3, Defendant's Providence Exhibit No. 4, Defendant's Providence Exhibit No. 5, Defendant's Providence Exhibit No. 6, Defendant's Providence Exhibit No. 7 and Defendant's Providence Exhibit No. 8, all of said exhibits being identified by the signature of the Commissioner and returned with such depositions, such depositions being filed in the office of the Clerk of the United States District Court for the Northern District of Illinois, Eastern Division, on March 1, 1917.

Mr. Zane: Now, that is one set of depositions that he has offered. We object to the depositions because they are taken wholly without authority, they are not taken under an order of the court or order of the Master, and they are taken upon evidence, in regard to evidence,
which was offered before the Master and excluded by the Mas-
1294 ter, they were not taken within any time allowed by the rules
and therefore they are not admissible under any circumstances. Now, that proposition I can state very shortly. The original offer was made by Mr. Hibben in these words: "We now request the Master to fix a time and place in the City of Providence, Rhode Island, for the taking of testimony of certain witnesses, at which time and place we offer to prove by witnesses residing in the State of Rhode Island that for a period of upwards of twenty years prior to the time the defendant herein began to make and sell automatic scales embodying the cylinder or drum certain weighing and computing scales were extensively made at Pawtucket, Rhode Island, and were sold throughout the New England States, and that such scales were practical, successful and commercial scales.

That such scales were automatic weighing and computing scales and included a casing which enclosed a rotatable indicator drum consisting of spaced apart skeleton frames or spiders made of wood and secured to a central shaft or spindle, and also a paper covering in the form of a cylinder secured to the peripheries of these spindles. On this covering was a chart on which was indicated weights and prices computations which were exposed through a horizontal slot in the enclosing casing, which slot had on an edge price per pound marks which in connection with the price computations indicated the price of the article being weighed according to the price per pound; that, while these indicator drums employing the wooden spiders weighed more than drums of the same size employing metal spiders as made and sold by the defendant herein, they operated in the same manner and produced substantially the same result as the indicator drum of the Smith patent in suit. That the use of these scales, including said indicator drums, was free and open to the public including this defendant for many years prior to said date of manufacture of cylinder scales by this defendant, and particularly that such use was free and open to the defendant during the infringing period of these accounting proceedings." And so on.

Now, at the time that offer was made the argument was made on
the admissibility of this evidence and the evidence was ex-
1295 cluded. The later discussion developed that this evidence
was in regard to the Phinney scale although it was stated that evidence as to the use of other scales than the Phinney scale would

be introduced. It appeared that the Phinney patent was one of the issues in the case which went to the Court of Appeals and there this Phinney patent was excluded as an anticipation and the Circuit Court of Appeals said in so many words that the patent was not of a thing that could be used. Now, after that evidence was excluded by the Master they offered and presented to us a notice to take these depositions. We reserved our rights upon the notice served. The depositions were objected to being taken on the ground that there was no right or authority to take them at all and now the question here is I suppose as if these depositions had been offered by the defendant as a part of his case considering his offer made at this time, as having been made at the end of his case and reserved up to this time. Of course, if they are offered now in rebuttal, they are not rebuttal at all, but considering them as part of the defendant's case——

The Master: That is understood.

Mr. Meads: Oh, yes, that was understood.

Mr. Zane: We all understand that.

The Master: And this should be put into the record I assume before you close your case.

(Here followed extended argument.)

The Master: I will sustain the objection on the grounds that the deposition was irregularly taken, it not being taken by an order of court or by any order of the Master, and on the grounds that the competency of this testimony was presented and decided by the Master before the depositions were taken, that is to say, counsel for the defendant made an offer of what he expected to prove by the witnesses at Providence, Rhode Island, and the Master held that certain testimony, if proven, would be incompetent and therefore declined to go to Providence for the purpose of taking the depositions. The Master was willing to go to Providence or anywhere else to take testimony if he regarded the testimony proposed to be taken as competent and for the further reason that I am still of the opinion that I was when the offer to prove was made, that the testimony itself is incompetent.

1296 (Said depositions, together with exhibits, so offered but not received in evidence, marked Defendant's Exhibit 66, Offered but not Admitted.)

Mr. Meads: Counsel for defendant offers in evidence depositions of Orwell C. Reeves, William L. Flaherty, Edward J. Kindow, taken before Mark Winchester, Notary Public, in the City of Toledo, Ohio, on May 2, 1917, together with the notice for the taking of such depositions attached thereto, and receipt of counsel for the complainant in this cause endorsed thereon, at which such depositions John M. Zane appeared on behalf of the complainant and Samuel E. Hibben and Albert H. Meads on behalf of the defendant, together with exhibit marked Toledo Exhibit No. 1, returned with such deposition, such depositions being filed in the Clerk's office of the United States District Court for the Northern District of Illinois for the Eastern Division on May 29, 1917.

Mr. Zane: Same objection.

The Master: I don't know upon what subject these depositions were taken.

Mr. Zane: The Phinney scale.

The Master: Is this on the same subject as the witnesses whose depositions were taken at Providence?

Mr. Meads: Partly, and partly no, if your Honor please.

(Discussion.)

The Master: I will sustain the objection on the ground that the depositions were taken without authority.

(Said depositions and exhibit, so offered but not received in evidence, marked Defendant's Exhibit 67, Offered but not Admitted.)

Depositions of Witnesses Taken at Providence, Rhode Island, by George Farnell, Notary Public, Commencing on the 21st Day of February, 1917, in Room 1314 Turks Head Building, in the City of Providence, Rhode Island, and Continuing from Day to Day.

Appearances:

John M. Zane, for Plaintiff.
Albert H. Meads, S. E. Hibben, for Defendant.

1297 JOHN H. DEVLIN, a witness on behalf of defendant was duly sworn, whereupon, by agreement, counsel, witnesses and the Magistrate proceeded to the Federal Building in the City of Providence, and resumed the hearing in Room 309 in said Federal Building.

Mr. Zane: The plaintiff objects to the taking of depositions of the witnesses named in the notice and that are now offered, for the following reasons:

This evidence has twice been offered to the Circuit Court of Appeals, once before the judge in the Circuit Court of Appeals, in order to allow a portion of the appeal to be dismissed, and the case remanded from taking of this evidence; and a second time after judgment of the Circuit Court of Appeals to remand the case with leave to the lower court to receive this evidence. Both applications were rejected upon the ground that the evidence was not admissible.

Second. The evidence is not admissible on any issue in this case that has been made, or is now open to inquiry.

Third. The evidence is not admissible upon any issue referred to the Master.

Fourth. The evidence cannot be taken for the reason that it has been offered before the Master and by the Master rejected.

"United States District Court, Northern District of Illinois.

In Equity.

No. 30024.

"THE COMPUTING SCALE COMPANY,

VS.

TOLEDO COMPUTING SCALE COMPANY.

"Depositions of Witnesses Taken by George Farnell, Notary Public Within and for the County of Providence and State of Rhode Island, Pursuant to Notice Hereto Attached, Commencing on the 21st Day of February, A. D. 1917, at Room 1314 Turks Head Building, in the City of Providence, State of Rhode Island, at 10 a. m., and Continued from Day to Day as is Hereinafter set forth.

"Appearances:

The Plaintiff is represented by John M. Zane, Esq.
The defendant is represented by Samual E. Hibben, Esq., and Albert H. Meads, Esq.

1298 JOHN H. DEVLIN is duly sworn as a witness for the defendant whereupon, by agreement, counsel, witnesses and the Magistrate proceed to the Federal Building in the City of Providence and resume the hearing in Room 309 in said Federal Building.

Thomas Z. Phinney.

"THOMAS Z. PHINNEY, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Mr. Zane: The plaintiff objects to the taking of the depositions of the witnesses named in the notice and that are now offered, for the following reasons:

"This evidence has twice before been offered to the circuit court of appeals, once before the judge of the circuit court of appeals in order to allow a portion of the appeal to be dismissed and the case, remanded for the taking of this evidence; and a second time after judgment of the circuit court of appeals to remand the case with leave to the lower court to receive this evidence. Both applications were rejected upon the ground that the evidence was not admissible.

"Second, the evidence is not admissible on any issue in this case that has been made or is now open to inquiry.

"Third, the evidence is not admissible upon any issue referred to the Master.

"Four, the evidence cannot be taken for the reason that it has been offered before the Master and by the Master rejected.

"By Mr. Meads:

"Q. 1. What is your name?
"Ans. Thomas Z. Phinney.
"Q. 2. Where do you live?
"Ans. 200 Indiana avenue, Providence, Rhode Island.
"Q. 3. What is your age?
"Ans. I will be fifty-seven the 26th of November.
"Q. 4. In the year 1917?
"Ans. Yes, sir.
"Q. 5. Who was your father?
"Ans. William H. Phinney.
"Q. 6. Is your father still living?
"Ans. No, sir.
1299 "Q. 7. When did your father die?
"Ans. August, I think it was, 1902.
"Q. 8. Where did your father die?
"Ans. Pawtucket.
"Q. 9. Rhode Island?
"Ans. Pawtucket, Rhode Island.
"Q. 10. How far, approximately, is it from here to Pawtucket?
"Ans. About four miles.
"Q. 11. What is your business now?
"Ans. Confectionery.
"Q. 12. How long have you been in the confectionery business?
"Ans. Well, in the neighborhood of thirty years.
"Q. 13. How long have you been in such business in the city of Providence?
"Ans. In the neighberhood of fifteen years.
"Q. 14. Before that time where were you engaged in business?
"Ans. In Pawtucket, and one spell in Attleboro.
"Q. 15. Were you, at any time, associated with your father in business?
"Ans. Not as a partner, only helping him.
"Q. 16. In what capacity?
"Ans. Well, my father being deaf I was with him a great deal in his business transactions.
"Q. 17. For what purpose?
"Ans. To act as ears for him, to tell him anything that was said or done, so that he could understand it; being used to my voice he would be sure what was said—I repeated it.
"Q. 18. About when did you begin to act, as you say, as ears to your father?
"Ans. The first time I have any distinct recollection was the time he got his patent papers in Boston, in '70. I was then ten years old.
"Q. 19. Got his patent papers, for what?
"Ans. For the scales.

"Q. 20. What scales?

"Ans. The "Phinney Self-reckoning Scales."

"Q. 21. After that time how often did you see your father, up to the time of his death?

"Ans. Well, practically the biggest part of the time, every day.

1300 "Q. 22. Where did your father live at that time?

"Ans. Corner of East avenue and Grace street.

"Q. 23. In what place?

"Ans. In Pawtucket.

"Q. 24. Where did you live?

"Ans. Part of the time I lived in the house with father and there was some years I lived in Attleboro, but the biggest part of my life was living in the house with father, until the last fifteen years.

"Q. 25. In 1870, when you say he got his patent papers, where were you both living?

"Ans. Corner of East avenue and Grace street.

"Q. 26. In the same house?

"Ans. The same house; at that time it was called Jenks street, I believe.

"Q. 27. In a general way was the scale that you have mentioned—what kind of a scale was it?

"Ans. It was a spring balance self-reckoning scale, made to weigh, both weigh and give the price at the same time.

"Q. 28. When did you first see any of such scales?

"Ans. I was so young, I don't remember. I was brought up with them. He commenced the scale about the time I was born, he commenced work on them.

"Q. 29. After 1870 what did your father do as to those scales?

"Ans. Well, he was working on them all the time, making them now and then right along, until he got too old.

"Q. 30. What was your father's age in August 1902 when you say he died?

"Ans. I couldn't answer that question.

"Q. 31. Did you, yourself, ever see any of those scales in actual use?

"Ans. Yes, sir; a great many.

"Q. 32. In what places, what cities or towns?

"Ans. I have seen them in Providence, Pawtucket, Central Falls—you mean in actual stores?

"Q. 33. Yes: Or any other place where they were being used?

"Ans. You don't mean exhibition use, only actual business use.

"Q. 34. I am now speaking of actual business use—in what towns?

1301 "Ans. Pawtucket, Central Falls and Providence, and Attleboro.

"Q. 35. About when, as near as you can state, was the first of those scales you saw in use in any store?

"Ans. Well, I should say about 1875.

"Q. 36. In what place?

"Ans. Mr. John Devlin's store, and also in Dan Horton's.

"Q. 37. Those stores were where, in what place?

"Ans. Mr. Devlin's store was on Pleasant street, I don't know the number.

"Q. 38. In what place?

"Ans. In Pawtucket.

"Q. 39. And where was Mr. Horton's store?

"Ans. Mr. Horton's store—it was on Pine street, and I think it was on Main street too, once; it seems to me he had it in both places. He moved.

"Q. 40. Did you, yourself, ever use one of those scales?

"Ans. Yes, sir; a great many years.

"Q. 41. In what business did you, yourself, use it?

"Ans. In my confectionery business.

"Q. 42. Where?

"Ans. I used it in the shop for weighing out the stock in making our goods.

"Q. 43. Where was that confectionery business?

"Ans. It was located at what we used to call the Jenks' mill, at one time, on Main street, Pawtucket, and at 11 Grace street. It was the shop back of the house, what used to be father's shop. After he gave up I moved my business into the old shop.

"Q. 44. About when did you first use one of those scales?

"Ans. Well, I have used them in my business about thirty years ago, first; but I had used them at home all my life.

"Q. 45. I show you a brass encased instrument. On the face of it appears the inscription: "William H. Phinney, Pawtucket, R. I.," over a horizontal slot, which instrument I ask the Commissioner to label and mark for identification "Providence Exhibit 1," and ask you if you know what that is?

"Ans. That is a scale that I put together myself.

"Q. 46. Was the scale itself ever used?

"Ans. It was put together out of parts of a scale that father had built up years before.

1302 "Q. 47. Will you please state how that instrument was operated, if it was operated?

"Ans. It hung from the ring, and a pan underneath.

"Q. 48. The ring on the top was for the purpose of suspending the instrument, was it?

"Ans. Yes, sir.

"Q. 49. There is, on the bottom, a projecting brass rod on which there is a brass hook: What, if anything, was suspended on the last named brass hook?

"Ans. A pen similar to all scales.

"Q. 50. For what purpose was the pan?

"Ans. Putting in meat, or groceries, or anything we wished to weigh.

"Q. 51. As the brass hook is depressed there appears to be a revolution of some part of the instrument on the interior, such po-tion being specially designated or identified by various figures on it: What is that portion that moves when the brass hook is depressed?

"Ans. That is the drum with the figures on to tell us the weight

and price per pound, and also the price of the commodity that is on the pan.

"Q. 52. Below the horizontal slit on the face of the instrument appear certain numbers, as follows:

"Beginning at the right and reading towards the left:

" "Oz" in the first column, then in each column successively, "lbs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25." What do those numbers last read refer to, if anything?

"Ans. The "oz." refers to ounces and the figure that comes up when anything is put on the pan opposite the "oz." is the ounces that it weighs. The "lbs." is the pounds that it weighs so that it reads pounds and ounces. The figures are the price of one pound and the corresponding figure opposite is the price of the whole.

"Q. 53. Then, the figures from 2 to 25, inclusive, which I have read, represent the price per pound at which the commodity was offered for sale: Is that it?

"Ans. Yes, sir.

"Q. 54. This particular device "Providence Exhibit 1"—where was it before it was brought to this hearing this morning?

"Ans. It has been in Washington for some dozen years or so, and I loaned those scales to Howson & Howson when they were
1303 here—I have forgotten the year, but I should judge it was a dozen years ago, and they were returned, I guess, about a year ago; I couldn't tell exactly when they were returned.

"Q. 55. Returned to whom?

"Ans. To me.

"Q. 56. And have they been in your possession since?

"Ans. Ever since.

"Q. 57. And this morning, before they were brought to this hearing, in whose care were they?

"Ans. They have been in my care ever since they have been returned from Washington?

"Q. 58. And where?

"Ans. At my home, nailed up in the cellar.

"Q. 59. This particular instrument, referring to "Providence Exhibit 1"—was this instrument ever in use?

"Ans. Yes, sir.

"Q. 60. Where?

"Ans. In my shop.

"Q. 61. Where?

"Ans. In Pawtucket, Rhode Island; corner of East avenue and Grace street, or 11 Grace street, in the rear of the house.

"Q. 62. As near as you can, state when the instrument itself was in use in that shop?

"Ans. I should judge about, somewheres about between 1875 and 1880—no, between 1880 and 1885.

"Q. 63. Who assembled this instrument?

"A. I assembled it.

"Q. 64. Who made the brass containing case?

"Ans. A coppersmith by the name of Danz, of Pawtucket, Rhode Island—I have forgotton his first name; I don't know his first name.

"Q. 65. Is this coppersmith Danz living?

"Ans. No, sir; he is dead.

"Q. 66. Who made the revolving cylinder in the exhibit in question.

"Ans. My father, William H. Phinney.

"Q. 67. Of what material is the surface which you see through this horizontal slot?

"Ans. It is made of paper covered with shellac.

"Q. 68. And on that paper are certain numbers printed; Do you know where that printing was done?

1304 "Ans. It was printed in what we called the Chronicle office, Nickerson & Sibley office, the old Chronicle office.

"Q. 69. Where was that?

"Ans. In Pawtucket, Rhode Island.

"Q. 70. Projecting from the ends of the exhibit are two ends threaded on each of which there is a small hexagonal notch: What is the material of which that rod, the projections of which are shown, is made?

"Ans. I wouldn't say whether it was iron or steel, but I have an idea they were steel.

"Q. 71. Those are for the purpose of holding the end plates in position, are they?

"Ans. The purpose of the drum turning on. They are sharpened on the point and they go into the hollow on the end of the shaft for the drum to turn on.

"Q. 72. On the end of the drum, in the center, is an indentation, is there not?

"Ans. Yes.

"Q. 73. Into which those small shafts enter?

"Ans. Yes.

"Q. 74. Now, through the center of the drum itself, is there any shaft?

"Ans. The shaft goes away through.

"Q. 75. The ends of the drum are made of, what material?—in this particular device.

"Ans. You mean, the ends of the inside drum?

"Q. 76. The ends of the inside of the drum.

"Ans. Some is made of white wood, some of Spanish cedar. They were made of wood.

"Q. 77. When was the drum, which you have mentioned in the device in question, made?

"Ans. Well, I couldn't say, because father made those drums some years before I put it together, and it was made from a scale that had been in use, part of it—it was made from different parts that I picked up out of a lot that he had in the shop.

"Q. 78. You, yourself, had nothing to do with the actual construction of the drum?

"Ans. No, sir.

"Q. 79. That had been made before you assembled the scale, by your father: Is that it?

"Ans. Yes.

1305 "Q. 80. So that that was before the period you have mentioned, viz., 1880 to 1885?

"Ans. Yes.

"Q. 81. Is Mr. Nickerson, of the firm of printers you have mentioned, alive?

"Ans. No, sir; he is dead.

"Q. 82. Is Mr. Sibley alive?

"Ans. He is dead too.

"Q. 83. Where, in your shop where you used this device in your candy business, did this scale hang?

"Ans. It hung right over the bench.

"Q. 84. Was that in plain view?

"Ans. Yes, sir.

"Q. 85. How long was it there in plain view?

"Ans. Well, more than ten years.

"Q. 86. Where was the bench in your shop?

"Ans. Well, it was on the right hand side of the shop, as you enter the shop; and it was right within five feet of the door as you went into the work room. It was in the work room. It was in the work room of the shop.

"Q. 87. Was there anything to conceal this instrument from the view of the public?

"Ans. No, sir; it hung right in front.

"Q. 88. Then it could be seen from the outside, could it?

"Ans. A party could see the back part of it from the outside. It was hung facing the inside.

"Q. 89. Did any one in the shop besides you use this device, Providence Exhibit 1?

"Ans. Yes, all the help used it.

"Q. 90. What help did you have?

"Ans. Well, we had—well, I can't tell. I think there was a man named Titus was working, at that time, for me.

"Q. 91. Not the names especially, but how many help did you have?

"Ans. Well, at that time I had about three in the shop.

"Q. 92. Besides yourself?

"Ans. There was about three besides myself, at that time, working in the shop, and they was not working on the scale; they were working in the shop, helping, but they saw the scale all the time being used. As a general thing I done the weighing myself.

1306 "Q. 93. Were there always some employes in the shop besides yourself, in Pawtucket?

"Ans. Not always, but most of the time there was. There was anywhere from one to six or seven or eight there.

"Q. 94. The highest number of employes you had, at any one time, being eight?

"Ans. Well, I should say it was just about that.

"Q. 95. I show you an instrument which I ask the Commissioner to mark "Providence Exhibit 2," which is a metal encased cylinder, similar to Providence Exhibit 1, save that the metal appears to be other metal: Can you state what that metal is?

"Ans. Cast iron.

"Q. 96. Where was this Providence Exhibit 2 this morning before it was brought to this hearing?

"Ans. At my house on Indiana avenue, Providence.

"Q. 97. How long had it been at that house?

"Ans. Since it came back from Washington.

"Q. 98. When was that, as near as you can tell?

"Ans. It was a year or two ago; they all came back together.

"Q. 99. When you say it came back from Washington—who sent it to Washington?

"Ans. This was a part of the exhibit that was lent to Howson & Howson and went on at the time of the other suit.

"Q. 100. At the same time "Providence Exhibit 1" went on?

"Ans. Yes; they all went together. They all came back together.

"Q. 101. What is this device or instrument?

"Ans. Similar to the other on the inside; the working is the same with the exception of a different outside casing.

"Q. 102. Before this instrument went to Washington in whose custody was it?

"Ans. In my custody.

"Q. 103. Where did you get it?

"Ans. It was amongst the stuff that father let me have when he let me have the scales.

"Q. 104. When this was turned over to you by your father, where did you live?

"Ans. At the corner of East avenue and Grace street, Pawtucket.

1307 "Q. 105. Do you know the history of this instrument at all.

"Ans. I don't, only that it was a scale that was injured some way and brought back, and he gave them a new scale and then I fixed it up.

"Q. 106. About when, as near as you can tell?

"Ans. Well, I couldn't state any definite time.

"Q. 107. Can you state beyond any time?

"Ans. Well, it was, I should say, along 1890, somewheres along there, between 1885 and 1890. It was one of the old scales, I know.

"Q. 108. I have removed the front portion of the casing of the device in question, and ask you to look at the drum or cylinder on which appear the value and weight indications, and state what the material, the end pieces of such drum, is made of?

"Ans. In my judgment I should call it Spanish cedar.

"Q. 109. What was your father's business?

"Ans. A carpenter.

"Q. 110. Are you sufficiently conversant with wood, yourself, to determine in any event whether it is cedar?

"Ans. I am not an expert.

"Q. 111. The end pieces are of wood?
"Ans. Yes, sir.
"Q. 112. That, you are sure of?
"Ans. Yes, sir.
"Q. 113. Cut in the form of a wheel out of a solid piece of wood?
"Ans. Yes, sir.
"Q. 114. From the center of the drum there is a shaft or spindle: Of what material is that made?
"Ans. Wood, white wood.
"Q. 115. Was that method of construction as to such shaft always followed?
"Ans. Well, no, it was not. On the later scales they took away with that wooden shaft and let the motion shaft go through. There was a shaft went through those wooden cores, and on the later scales he done away with the wooden part.
"Q. 116. When he did away with the wooden part, of what material did he make the shaft?
"Ans. Steel.
"Q. 117. What is the material about this cylinder on which the numbers are printed?
"Ans. The printing was on paper.
1308 "Q. 118. Underneath the paper is there anything?
"Ans. On a very few of the drums were made of a light wood, very thin, bent, and then the paper put on, and then afterwards he done away with the wood altogether and used the paper, but when he first started he used the wood.
"Q. 119. Do you know about when it was your father turned his business over to you?
"Ans. Well, I couldn't tell definitely.
"Q. 120. Well, as near as you can?
"Ans. Well, I should judge about, along about between 1890 and 1895, somewhere about 1890, I think—I think it was earlier than that: I think between 1895 and 1890.
"Q. 121. How long before he turned his business over to you had he been using the paper around these charts?
"Ans. I couldn't say. Most of the scales were used with paper but only a few *few* wooden. Wooden was the first ones.
"Q. 122. All the later scales had a paper circumference?
"Ans. Yes.
"Q. 123. That was all prior to the time the business was turned over to you?
"Ans. Oh, yes.
"Q. 124. After it was turned over to you there were no scales made with the wooden cylinder on the outside?
"Ans. All the cylinders, was made when he turned it over. I never made a cylinder, in fact, I never made any pieces. All the pieces—he simply turned everything in the rough to me, and I put them together.
"Q. 125. So that prior to 1890—all the later cylinders were covered with paper without anything between?
"Ans. Yes, sir.

"Q. 126. In the device in question the center shaft, or toothed slotted piece of metal appears loose between the two halves of the drum: Where is the small cog wheel, if there was one which operated in those teeth?

"Ans. That disappeared from the time it left here and got back from Washington.

"Q. 127. When the instrument went to Washington it was operated, was it?

"Ans. Yes, sir.

"Q. 128. When this instrument went to Washington, just tell what condition it was in?

"Ans. It was in altogether working order.

1309 "Q. 129. Was there a shaft in it?

"Ans. There was a shaft in it; that is the best of my recollection.

"Q. 130. In addition to the two forms of computing scales which you have identified, were there any other forms of such scales manufactured either by you or your father?

"Ans. There were two other patterns, styles.

"Q. 131. I have in my hand a wooden cabinet with certain mechanism in it which I will ask the Commissioner to mark "Providence Exhibit 3," and ask you from what place, this morning, was this device taken?

"Ans. It was taken—at the present time, you mean?

"Q. 132. From what place, this morning, was it taken?

"Ans. From my house, 200 Indiana avenue.

"Q. 113. Where had it been kept in your house?

"Ans. In the cellar, packed away with the rest.

"Q. 134. How long had it been in your house?

"Ans. Since it came back from Washington with the other exhibits.

"Q. 135. Was this sent to Washington with Howson & Howson along with Providence Exhibits 1 and 2?

"Ans. Yes, sir.

"Q. 136. Before it was sent to Washington in whose possession was it?

"Ans. It was in my father's possession and set in the kitchen at home.

"Q. 137. When he turned his business over to you it came into your possession: Is that right?

"Ans. Yes, sir; also father moved up in the country and we took his tenement and my wife used it for some time until it went to—it was in my wife's possession, in the same place, until it went to Washington.

"Q. 138. And since it has returned from Washington it has been continually in your possession, until this morning?

"Ans: Yes, sir.

"Q. 139. This device has two openings in the upper part, about 2½ inches in width and 8 or 9 inches in height: for what purpose, if you know, were those openings?

"Ans. Just to put in store book. It is simply a matter of ornament—a receptable for anything. The center part between the two openings was the place where the spring came.

"Q. 140. The projection at the bottom of the device, the movable piece of metal on which there was a hook, was calculated to work, how?

"Ans. With the pans to hang on it.

1310 "Q. 141. Just explain how this device was used, if it was used, in actual operation.

"Ans. It was set on brackets on the wall, then a pan hung on a hook; whatever you wanted to weigh you put in the pan, same as in any scale, then you got your weight and price.

"Q. 142. The brackets on the wall were spaced far enough to allow the hook to hang between them?

"Ans. Yes.

"Q. 143. Do you know where this particular device, Providence Exhibit 3, was made?

"Ans. That was made at the corner of East avenue and Grace street, in the rear of the corner.

"Q. 144. On the side of the device appears a label—"Town of Pawtucket, R. I., John H. Potter, Town Sealer, sealed January 9, 1880:" Was that label on there when it went to Washington?

"Ans. Yes, sir; it was.

"Q. 145. Was that label on there when you received the scale from your father.

"Ans. Yes, sir.

"Q. 146. Do you know, of your own knowledge, whether that particular scale was ever in use?

"Ans. It was in constant use for a great many years. Everything that came into the house mother would weigh—from the grocer or butcher—it was weighed on that scale, and a good many times if the neighbors wanted to weigh anything they would come in and weigh it.

"Q. 147. Do you know, of your own knowledge, whether that particular device was manufactured before January 9, 1880?

"Ans. I do.

"Q. 148. Was it so manufactured?

"Ans. It was manufactured right along there for years before.

"Q. 149. Do you know when this label was put on the scale?

"Ans. The sealer put the label on, that is all I know—Mr. Potter. I remember Mr. Potter was an old man. I should judge he is a man eighty years old at the time he was sealer of weights and measures.

"Q. 150. Where was it put on—in Pawtucket?

"Ans. In Pawtucket.

"Q. 151. And has it been on that instrument ever since it was affixed there by Mr. Potter?

1311 "Ans. Yes, sir.

"Q. 152. Is Mr. Potter living?

"Ans. No, sir; he has been dead a great many years.

"Q. 153. Do you know, Mr. Phinney, of what material the spider on which the paper cylinder is wrapped, in Providence Exhibit 3, is made?

"Ans. Well, I wouldn't want to say whether that was wooden or paper, but I think that is a paper one.

"Q. 154. Is the entire cylinder made of paper?

"Ans. I think it is, with the exception of the heads.

"Q. 155. What material, in this device, are the heads or ends of the cylinder made?

"Ans. I think those are the wooden ones.

"Q. 156. Do you know whether any scales of the particular pattern of Providence Exhibit 3 were ever sold or used anywhere?

"Ans. Yes, sir; there were.

"Q. 157. Where?

"Ans. Mr. Devlin had one; Mr. Devlin's father had one, I think, of that same pattern, and I think Mr. Horton had one of both patterns—the iron and the wooden ones.

"Q. 158. Anybody else?

"Ans. Mr. Tierney had one of that pattern.

"Q. 159. Do you know whether any of such scales were used by any of those parties, in business, for any time?

"Ans. They were used for a number of years, in constant use.

"Q. 160. Where was the place of business of Mr. Devlin?

"Ans. The first Mr. Devlin was on Pleasant street, and his son, the second Mr. Devlin's store, was on River street in Pawtucket, Rhode Island.

"Q. 161. Where was the place of business of Mr. Horton?

"Ans. It was on Pine street; and I think he was on Main street for one spell.

"Q. 162. In what place?

"Ans. In Pawtucket.

"Q. 163. Where was the place of business of Mr. Tierney?

"Ans. It is what we call Pleasant View, in Pawtucket, and I think the street is called Middle street. I think it is Middle street.

"Q. 164. As near as you can, state when the scales of Mr. Devlin, Mr. Horton and Mr. Tierney, were sold and used?

1312 "Ans. Well, I couldn't tell, but somewheres in the neighborhood of 1874 and 1875, or 1876; somewhere in that neighborhood, I should judge, because they were the first ones father put out.

"Q. 165. Did you know William M. Raymond?

"Ans. I did.

"Q. 166. Where did he live?

"Ans. Well, we called it the Boston Pike—I believe it is called Broadway now—in Attleboro, Massachusetts.

"Q. 167. Is he alive?

"Ans. He is alive but in the hopital. He is a man over ninety years old.

"Q. 168. In the hospital where?

"Ans. I don't know. He is in the hospital, sick, at the present time. I think he is ninety-two years old.

"Q. 169. Do you know whether he had, at any time, one of these scales?

"Ans. Yes, sir; he did. He had two.

"Q. 170. Of what kind?

"Ans. The hanging scale I know one was, and I think the second—I can't say whether it was a hanging or one of the box scales.

"Q. 171. The first one was a hanging scale?

"Ans. The cast iron frame.

"Q. 172. He had two of the scales?

"Ans. He had two.

"Q. 173. Do you know at what price those scales were sold by your father?

"Ans. Anywhere from $10 to $15 apiece.

"Q. 174. I show you a paper covered drum or cylinder, through the center of which there is a metal toothed shaft, slotted, in which operates a pinion wheel, and which I will ask the Commissioner to mark "Providence Exhibit 4," and ask you where, this morning, before this hearing, this drum and other parts were?

"Ans. In my possession, at my home, 200 Indiana avenue, Providence.

"Q. 175. How long had they been there?

"Ans. Since the lot cam from Washington.

"Q. 176. The same time to which you have referred before?

"Ans. Yes; No, I will have to alter that—I am not certain whether this is one of the drums or not as they have been mixed up so.

1313 "Q. 177. You are not sure whether this drum went to Washington or not?

"Ans. I am not sure whether this drum went to Washington or not; I don't think it did, this, but I can't pick them apart.

"Q. 178. Either whether it went to Washington or not, where did you get the drum in the first place?

"Ans. Part of the stock that my father turned over to me.

"Q. 179. Who made this drum?

"Ans. My father.

"Q. 180. Before he turned the business over to you?

"Ans. Yes, sir.

"Q. 181. Of what substance are the end pieces of the drum in question made?

"Ans. Wood.

"Q. 182. Through the center of the drum is an axis or shaft: Of what material is that axis or shaft made?

"Ans. Steel.

"Q. 183. Outside the wooden pieces and forming the exterior of the drum is a printed lot of figures: On what substance are those figures printed?

"Ans. On paper.

"Q. 184. Of how many sheets does that paper consist?

"Ans. I couldn't say but I think there was one. The drums was covered first and then the printed sheets was pasted on the paper cover.

"Q. 185. And after that was done, what was done?

"Ans. They were shellacked.

"Q. 186. Unless this particular drum was one of those sent to Washington has it been in your custody ever since it was turned over to you by your father?

"Objected to.

"Ans. Yes, sir; it has.

"Defendant's counsel offers in evidence:

"Defendant's Exhibit 1";
"Defendant's Exhibit 2";
"Defendant's Exhibit 3"; and
"Defendant's Exhibit 4

identified by the witness.

"Plaintiff's counsel objects on the ground heretofore stated, and on the further ground that there is nothing in the evidence to show that these devices, whatever they were, were capable of mercantile use.

1314 "Q. 187. Did your father advertise in any way the device which you have described?

"Ans. He did.

"Q. 188. I show you a circular, on the upper left hand corner of which appears an engraved or lithographed reproduction of some instrument, and ask if you know what that instrument is?

"Ans. That is a picture of the last pattern that father made of the scales, a picture of this kind here (Indicating Providence Exhibit 4) with a different form of front, and it was the last pattern, the last style that he made.

"Q. 189. Before he turned the business over to you?

"Ans. Yes.

"Q. 190. Opposite the reproduction appear the words

"Phinney Patent, self-reckoning, spring scale. The only practical price giving scale on the globe. It has been in constant use for a number of years, and for saving of time and labor it leaves all others behind. It is designed for retail dealers in markets and groceries, and for families and farmers it will displace all others, as a child of seven years old can give the weight and price of any article as readily and correctly as a grown person. When the price only is required, lay the article in the pan and the price is before you. There is no fixing and setting. No weights to be handled. No weighing—no reckoning, and no mistakes. For example: Suppose turkey is selling at 17c per pound—what is the price of a turkey? Look for 17 on the front of the scale; then lay the turkey in the pan and the price will appear in the slot above the 17. A diploma was awarded by the New Engand Agricultural Society, at Boston, in 1863 and also by all other exhibitions wherever entered. We have testimonials from many who have used them for a number of years. Wm. H. Phinney, Pawtucket, R. I.

E. L. Freeman & Co., Printers, Central Falls."

Where did you get that piece of paper?

"Counsel for the plaintiff objects to the purported reading from the document. If the document is admissible at all it will speak for itself. The proper way, if it is intended to introduce it, is to have it identified and then the witness refer to the identification. It is improper to read the whole document, or purport to read the whole document in a question.

"Ans. It was one of a number that my father left me amongst his other scale business.

1315 "Q. 191. When you say "left you," was it turned over to you at the time he turned the business over to you?

"Ans. Yes.

"Q. 192. Do you know, of your own knowledge, whether any of these were distributed?

"Ans. Yes, sir; they were, because I distributed a number of them myself.

"Q. 193. Where?

"Ans. At the Attleboro Fair, at the Taunton Fair, the Narragansett Fair and Woonsocket Fair.

"Q. 194. When you made that distribution was your father still in business?

"Ans. Yes; he was.

"Q. 195. You distributed them for him?

"Ans. Yes, sir; I took the scales to exhibit in the pairs.

Defendant's counsel offers in evidence the paper that witness has identified and asks that it be marked "Providence Exhibit 5."

"Mr. Zane: We object to the document as not properly identified and as not shown to have ever been used or circulated, and as irrelevant and improper.

By Mr. Meades:

"Q. 196. Other than taking these circulars to the various fairs—by circulars, I mean, the same as Providence Exhibit 5—did you ever distribute them anywhere else?

"Ans. Well, whenever anybody was talking scales we would pass them one out, or if we talked scales to anybody. My father sent some round to different parties. They were put up in a way, a sort of advertisement, to show what the machine was.

"Q. 197. I show you a card about 5 inches broad by 7 inches long, on which appear the following words:

"Self-reck-ing Balance. To weigh and give the price of 14 lbs. by 2 ounces. Directions. Place the article upon the pan, then look upon the fixed scale for the price per pound, and above on the movable scale is the price of the article. The weight is found in the same manner, by looking above pounds and ounces."

Where did you get that card, this morning?

"Ans. That came from my house, 200 Indiana avenue, Providence.

"Q. 198. How long had it been in your house?

"Ans. Ever since my father turned the scale business over to me.

1316 "Q. 199. And was this one of the things turned over, by him, at that time?

"Ans. It was.

"Q. 200. Were there any other of these cards besides this particular one, do you know?

"Ans. Well, there may be some more but I don't know where they are at the present. That was the first lot that he ever had printed that went with those (indicating Providence Exhibit 3). He used to put one of those on to show how they were used.

"Q. 201. When a scale was delivered to a customer what went with the scales?

"Ans. One of those cards with directions.

"Q. 202. That was the case in all those scales?

"Ans. Yes, supposed to be.

"Q. 203. Do you know, Mr. Phinney, whether there — any of those cards ever in existence except this particular card?

"Ans. Yes, sir; I remember there was a good many of them.

"Q. 204. Where did you see them?

"Ans. I saw them at home. I saw them at the shop; and when a scale went out he was supposed to put one of those with it.

"Q. 205. Do you know whether he ever did that?

"Ans. I have seen him take and carry them off.

"Q. 206. How many of such cards have you seen, more than one?

"Ans. Why, I saw quite a package, I should say there was a hundred; I never counted them—just as they came from the printer. That is a part of them there.

"Q. 207. Where was that, in Pawtucket?

"Ans. At Pawtucket?

"Counsel for the defendant offers in evidence the card identified by the witness and asks that it be marked "Providence Exhibit 6."

"Counsel for the plaintiff repeats his objection as originally, and also further objects on the ground that it is not shown that such a card was ever used for directions, or anything else, by any use.

"Direct examination closed.

"Mr. Zane: Mr. Notary, I wish you to mark this notice which I produce as "Plaintiff's Providence Exhibit No. 1" and attach it to the deposition.

"(The paper referred to is marked "Plaintiff's Providence Exhibit No. 1, Feb. 21/17 G. F.)

1317 "Mr. Zane: Now, I call upon the attorneys for the defendant to produce the original affidavit presented to the circuit court of appeals in this case, sworn to by this witness, Thomas Z. Phinney.

"Mr. Meads: We do not produce such affidavit. We have no such affidavit here to produce.

"Mr. Zane: Mr. Meads has already stated that he has made no inquiry at the office of Rector, Hibben, Davis & McCauley for this affidavit and I understand that it applies to all the other affidavits, Mr. Meads?

"Mr. Meads: Finish your statement.

"Mr. Zane: I am asking you a question.: Do you refuse to answer?

"Mr. Meads: I refuse to answer the question you now put because you are making a misstatement of what I stated here today.

"Mr. Zane: You say you made inquiry at the office of Rector, Hibben, Davis & McCauley for those affidavits?

"Mr. Meads: I did.

"Mr. Zane: When?

"Mr. Meads: On the day that you served the notice, or possibly the following day.

"Mr. Zane: Did you obtain the affidavits?

"Mr. Meads: I did not.

"Mr. Zane: Did you receive any answer from that office?

"Mr. Meads: Yes.

"Mr. Zane: From whom?

"Mr. Meads: From Mr. Rector.

"Mr. Zane: What did Rector say?

"Mr. Meads: That that branch of the case had been in charge of Mr. Davis and Mr. Davis was out of town and that he, himself, had no personal knowledge of where the affidavits were.

"Mr. Zane: Did you tell him to answer that way?

"Mr. Meads: I did not.

"Mr. Zane: Did you ask him to make any search through the records in his office?

"Mr. Meads: That is the substance of our conversation.

"Mr. Zane: Answer the question: Did you ask him to look through the papers?

"Mr. Meads: I am not a witness under oath. You can make any statement, on the record, you wish.

"Mr. Zane: Now, Mr. Hibben, you say you were out of town and you didn't know about the notice at all?

1318 "Mr. Hibben: That is correct.

"Mr. Zane: Not waiving any of the objections heretofore made, and not waiving the motion to strike this deposition from the files, if it shall be filed, on the ground that the attorneys for the defendant have not produced the original affidavit of this witness, but on the other hand, so far as appears from the record, deliberately suppressed the same, we now cross-examine this witness:

"X Q. 208. Mr. Phinney, do you remember that, at Providence, Rhode Island, on the 2nd day of January, 1913, before James H. Thurston, a Notary Public, you subscribed an affidavit?

"Ans. I do.

"X Q. 209. By whom was that affidavit drawn, if you know?

"Ans. I couldn't answer that question; I don't know.

"X Q. 210. By whom was it presented to you?

"Ans. Well, I couldn't answer that question.

"X Q. 211. By whom were you taken before the Notary?

"Ans. Now, I don't know. There was a Mr. Shurtleff was the original man that got me to go up there and a party from Boston, I can't think of his name, and then there was a lawyer from the West.

"X Q. 212. Who was Mr. Shurtleff?

"Ans. He was a salesman from the Standard Computing Scale Company.

"X Q. 213. Do you know who the lawyer from the West was?

"Ans. I can't think of the name now. I seen two or three at the time and I don't remember their names. There was a Mr. Davis, I think, one name.

"X Q. 214. A lawyer named Davis?

"Ans. I think there was a lawyer named Davis, and then there was a lawyer Pagelson, I think, though I am not certain.

"X Q. 215. Now, who was the man from Boston?

"Ans. I can't think of his name. He was the man that has charge of the Standard Scales, in Boston, of the selling.

"X Q. 216. The affidavit which you then subscribed was true was it?

"Ans. To the best of my knowledge.

"X Q. 217. In 1870, how old were you?

"Ans. Ten years old.

"X Q. 218. And your father died, at what time?

1319 "Ans. 1902.

"X Q. 219. In what month?

"Ans. I believe it was in October—let me see—August, if I am not mistaken.

"X Q. 220. What was the date your father turned over to you his matters?

"Ans. I have no recollection of the date.

"X Q. 221. Well, about how many years was it prior to his death?

"Ans. Well, all of ten years.

"X Q. 222. And how old were you at that time?

"Ans. Well, about thirty years old, somewheres in that neighborhood, twenty-five or thirty.

"X Q. 223. Then you think it was about 1887 that he turned the business over to you?

"Ans. Well, somewheres between 1885 and 1887, somewhere in that neighborhood between 1885 and 1890; I could not say, because I have no distinct recollection of anything to recall, the exact date.

"X Q. 224. Was there any writing made?

"Ans. No.

"X Q. 225. How old a man was he at the time he turned it over?

"Ans. I couldn't tell you that. I don't recollect how old father was.

"X Q. 226. You have no recollection how old he was when he died?

"Ans. Only somewheres—I think somewheres about seventy years old; yes; I guess father was over seventy.

"X Q. 227. When this affidavit was taken from you, were you told what it was for?

"Ans. Not particularly, only in a general way that they were looking up evidence to show the scales were made before.

"X Q. 228. You didn't know where the affidavit was going?

"Ans. Well, in a general way, that is all.

"X Q. 229. Well, what did you know? Where was the affidavit going?

"Ans. Well, as I understood it, the Standard Scale Company had a suit with the Dayton Scale Company and they were looking up evidence to prove that the scales had been made before.

"X Q. 230. Did you notice the court in which the paper you signed was entitled?

1320 "Ans. I did not.

"X Q. 231. Did you read over the paper, or was the paper read to you?

"Ans. I read it over.

"X Q. 232. Have you ever read it since?

"Ans. I couldn't say whether I had, or not.

"X Q. 233. How long before that time had the matter of these scales been drawn to your attention?

"Ans. Well, in what way do you mean? I don't know as I understand the question.

"X Q. 234. Well, prior to that time you signed this affidavit, had you had occasion to think about the matters connected with this scale?

"Ans. Well, you mean, in the form of litigation?

"X Q. 235. Well, I don't care what form it was in where you had to think of the facts connected with the scale—how long before that?

"Ans. Well, I don't really understand. I had been thinking of scales right along for years, but in a legal sense some ten years before, I should judge about ten years before.

"X Q. 236. Ten years before you subscribed this affidavit?

"Ans. Yes; I should judge about that, when Howson & Howson were here.

"X Q. 237. That would be sometime in 1903?

"Ans. I couldn't say when it was: I am only estimating that it was ten years.

"X Q. 238. That was in connection with what, please?

"Ans. As near as I can recollect it was the Landers, Ferris & Clarke, that had a case—the Dayton Scale Company, I guess, had the case against them. It was the Landers, Ferris & Clarke that came to us, and then also in conjunction with that, if I recollect right, there was one or two other scale companies that was connected with them in the case, as I understood.

"X Q. 239. At any rate, you had occasion to think of the facts in detail at that time?

"Ans. Yes, sir.

"X Q. 240. Was there any other time that you had occasion to think of the facts in detail before that?

"Ans. Well, there was a case where a party came to me and wanted scales, wanted me to make him a scale. They wanted to buy

one. I had none made to sell, and I made them one up. They took that scale.

1321 "X Q. 241. I am not asking you about anything of that kind except—did you, on that occasion, have any reason for thinking over the facts connected with this—only at that time, when this party came to you?

"Ans. Do I understand you, that you mean, did I think of a lawsuit in a legal way?

"X Q. 242. Any of the facts connected with the manufacture of any scale, by your father?

"Ans. I had been bothering round with them for years, and, of course, we always were thinking of them and thinking of improvements.

"X Q. 243. Now, since you subscribed this affidavit, with whom have you talked?

"Ans. Well, I have talked with my sons, with the attorneys here.

"X Q. 244. Which attorney that is here?

"Ans. All three.

"X Q. 245. When did you first talk with them?

"A. I talked with Mr. Frye about—well, I don't know, it seems to me about a year ago; it might possibly have been a year and a half, and another gentleman, and I can't place his name at present. Then I talked with Mr. Frye again about—no; I am wrong, I talked with the other gentleman and then Mr. Frye about, I guess, two or three months ago; and then Mr. Frye a couple of days ago.

"X Q. 246. Now, had you ever known Mr. Frye before that?

"Ans. I never saw Mr. Frye prior to the first time I speak of.

"X Q. 247. So that the first person you talked with in regard to the matters stated in your affidavit made before Mr. Thurston in 1913, was Mr. Frye?

"Ans. No, sir.

"X Q. 248. Who was the first person?

"Ans. I can't place the gentleman.

"X Q. 249. When was it?

"Ans. That I couldn't tell you.

"X Q. 250. Who was the man?

"Ans. I couldn't tell you that. He was a representative—there was a representative for the Standard people, and then there was another lawyer there, and I can't say who he was.

"X Q. 251. Was that after you subscribed this affidavit?

"Ans. That was the time.

1322 "X Q. 252. But I say after you subscribed this affidavit Mr. Frye was the first person you talked to?

"Ans. No.

"X Q. 253. Who was the first person?

"Ans. Well, I guess he was in a legal way, that is, in wanting any information or anything; but I talked with the President of the Toledo Scale Company, a person named Theobald. I met Mr. Theobold in Boston.

"X Q. 254. When was that?

"Ans. Sometime last fall; and we had a talk in an informal way.

"X Q. 255. What do you mean by "an informal way"?
"Ans. Well, we met socially and we naturally talked scales.
"X Q. 256. Now, since you subscribed this affidavit have you seen the affidavit, or a copy of it?
"Ans. I think I have, yes.
"X Q. 257. Who had that copy?
"Ans. Well, I was trying to think whether I had it myself or not.
"X Q. 258. Well, from whom did you obtain it?
"Ans. From Mr. Thurston, the lawyer.
"X Q. 259. The Notary Public?
"Ans. Yes, sir.
"X Q. 260. When did you obtain it from him?
"Ans. At the time.
"X Q. 261. At the time you subscribed it?
"Ans. Yes, sir.
"X Q. 262. He gave you a copy.
"Ans. Yes, sir.
"X Q. 263. Where is that copy now?
"Ans. I don't know; that is what I am trying to think.
"X Q. 264. You don't know what became of it?
"Ans. Well, I don't know whether I have it at home, or not.
"X Q. 265. Well, have you looked at that copy since the time you speak of, that you saw it?
"Ans. No, sir; I have not.
"X Q. 266. You didn't look at it just before coming here?
"Ans. No, sir.
"X Q. 267. Now, you say you recall that you were ten years old when your father got his patent papers, in Boston you say that was?
1323 "Ans. Yes, sir.
"X Q. 268. From whom?
"Ans. I don't know but it runs in my mind that it was a Rowell, or some such name as that, patent attorneys there. I am not certain about that.
"X Q. 269. Did those papers—patent papers have on them a picture of the scale?
"Ans. It did, in detail.
"X Q. 270. A detail of the scale?
"Ans. Yes, sir.
"X Q. 271. And all the scales that have been made were in accordance with that, generally speaking?
"Ans. The working part of these scales is exactly as they were originally.
"X Q. 272. In the patent?
"Ans. Yes, sir.
"X Q. 273. Did all these scales that you speak of bear this patent date?
"Ans. Yes, sir.
"X Q. 274. On Providence Exhibit 1, is the patent date put on the scale?

"Ans. No, sir; it is here but it never was put on the plate same as the others. It is on the face.

"X Q. 275. On the face of the scale?

"Ans. Yes, sir.

"X Q. 276. What are the words on the face of the scale?

"Ans. "William H. Phinney, patented in 1870, Self-reckoning Balance, W. H. Phinney, Pawtucket, R. I., patented August"—I can't read.

"X Q. 277. "Patented August 30, 1870": That was not read to you by the attorney *was* the defendant when he examined you, was it?

"Ans. What, just now?

"X Q. 278. Yes.

"Ans. I don't recollect whether it was or not.

"X Q. 279. On the Providence Exhibit No. 2 is the patent mark on it—"Patented August 30, 1870"?

"Ans. Yes, sir.

"X Q. 280. Is that same mark on Providence Exhibit 3?

"Ans. Yes, sir.

"X Q. 281. Where is it on Exhibit 3?

"Ans. I think it will be found on the face somewhere
1324 right on the slot—"Pawtucket, Rhode Island, patented August 30, 1870".

"X Q. 282. On Providence Exhibit No. 4 is the patent mark on it?

"Ans. On the drum—no, sir.

"X Q. 283. It was put on the outside of any scale that was made?

"Ans. Yes, sir; they were all put on the outside.

"X Q. 284. Now, I suppose when you were ten years old, in 1870, you were living with your father?

"Ans. I was.

"X Q. 285. And he was living then in the place you speak of?

"Ans. Yes, sir.

"X Q. 286. And what was his business? What was he doing?

"Ans. His trade was a carpenter.

"X Q. 287. Did he work at his trade after 1870?

"Ans. Yes.

"X Q. 288. Working continuously at it?

"Ans. No.

"X Q. 289. Did he have a carpenter's shop?

"Ans. He did.

"X Q. 290. And where was that carpenter shop?

"Ans. In the rear of the house, at the same place. We called the shop 11 Grace because the house stands on the corner of two streets.

"X Q. 291. And that is the same shop you speak of in connections with this scale?

"Ans. Yes, sir.

"X Q. 292. Were you ever a carpenter yourself?

"Ans. Well, no, I can't say as I ever was. I work at it though some.

"X Q. 293. Now, how long did you assist your father in his carpentry work?

"Ans. Well, as to the carpentry work, I worked with him about a year steady.

"X Q. 294. When was that?

"Ans. I couldn't say; and then I worked on and off. If I happened to have nothing to do and he had a job and wanted me to go in, I would go in for a few days.

"X Q. 295. A job of carpentering?

"Ans. Yes.

1325 "X Q. 296. Where was that carpentering work done, outside work, or in the shop?

"Ans. Both.

"X Q. 297. Beginning with 1870 were you at school?

"Ans. Yes, I went to school.

"X Q. 298. How long did you go to school?

"Ans. I went to school till I was, well, I should judge, about eighteen years old.

"X Q. 299. Then, you were going to school until 1878: That is true, is it not?

"Ans. Yes.

"X Q. 300. How many months in the year did you go to school?

"Ans. Well, I think the schools used to run forty weeks in the year, or something. I went the regular school year, whatever it was I don't recollect.

"X Q. 301. Usual school vacations three months, probably about that?

"Ans. About that; I should judge about forty weeks' schooling.

"X Q. 302. And during that time until you were eighten years old did you assist your father in any carpenter work?

"Ans. Well, yes, some, because I was always around home and was brought up in the place.

"X Q. 303. Now, during that time until you were eighteen, did you do any work on the scale itself?

"Ans. No; that is, I didn't do any putting together, or anything more than when we were making the drums father had the whole family help him out on the reckoning, and even when a little shaver we had to sit down and reckon.

"X Q. 305. That is, you made the calculations of the prices and weights?

"Ans. Yes.

"X Q. 306. But that was all?

"Ans. That is all. His idea was to have us all correspond.

"X Q. 307. It was one checking the other to see if the figures were correct?"

(No answer given.)

"X Q. 308. But so far as the work on the scale was concerned, the mechanical work, he did that himself?

"Ans. He did it himself.

"X Q. 309. You did not?

"Ans. No.

1326 "X Q. 310. Did you, at any time, do any of it?

"Ans. Well, later—well, I put them together but I never done any—well, for instance, of making drums—I never made a drum.

"X Q. 311. Or the parts?

"Ans. Or the parts; I never made any parts. I assembled them after he turned them over to me.

"X Q. 312. Now, when your father quit work, you say you think that was between 1885 and 1887?

"Ans. I should judge. I don't know that he did stop work because he stopped work gradually. He never gave up entirely until four or five years before he died.

"X Q. 313. Well, at the time he gave up work where were you living?

"Ans. At the time he gave up work I was living in Attleboro.

"X Q. 314. Did you, up to the time you quit school in 1878, continuously live with you- father?

"Ans. No, I did not.

"X Q. 315. Where were you living?

"Ans. I lived in Attleboro and carried on business in Pawtucket for about twelve years.

"X Q. 316. You were not carrying on business while you were at school?

"Ans. After I left home.

"X Q. 317. The question asked you was: Up to the time you quit school in 1878 did you continuously live with your father? That means from 1878 to the present?

"Ans. No—up to 1878, oh! yes, I did.

"X Q. 318. Then, when you quit school when did you first leave home?

"Ans. About thirty-four years ago, when I got married. I couldn't tell you what year it was.

"X Q. 319. You know how old you were when you were married, don't you?

"Ans. I do not.

"X Q. 320. Well, as soon as you were married, at any rate, you went to live at Attleboro.

"Ans. I went to live at Attleboro.

"X Q. 321. But you haven't any idea how old you were when you were married?

"Ans. About 21, 22 or 23, somewheres round there; I can't tell.

"X Q. 322. Well, that was 1881 or 1882 that you went to live in Attleboro: And how long did you live in Attleboro?

1327 "Ans. About twelve years.

"X Q. 323. That would be until 1894 or 1895, somewhere along there: Then you were living in Attleboro when your father turned his business over to you, whatever it was?

"Ans. Yes; but I was carrying on my business in Pawtucket.

"X Q. 324. Living in Attleboro?

"Ans. Yes; driving back and forth.

"X Q. 325. Morning and evening?

"Ans. Yes.

"X Q. 326. Now, what business did you carry on in Pawtucket?
"Ans. Pop corn and confectionery.
"X Q. 327. You didn't carry on any business in the shop with your father?
"Ans. Yes.
"X Q. 328. What business did you carry on there?
"Ans. Pop corn and confectionery business.
"X Q. 329. Oh! you used that?
"Ans. Yes.
"X Q. 330. So that, of course, all the carpenter part of it was cleared out?
"Ans. Practically, what we didn't want to sell.
"X Q. 331. So that you had stored away, or put away, everything in the way of parts of the scale that your father had turned over to you?
"Ans. Yes.
"X Q. 332. Where were those things placed or stored?
"Ans. At that time they were stored in the shop there just where he used to have them.
"X Q. 333. Now, were any completed scales turned over to you in the shop?
"Ans. Not in the shop. The scale there was in the shop.
"X Q. 334. What are you pointing to?
"Ans. The box scale.
"X Q. 335. Providence Exhibit 3 is the one you are pointing to?
"Ans. Yes.
"X Q. 336. That was in the shop?
"Ans. In the house.
"X Q. 337. No other completed scale?
"Ans. There was one other completed scale that is not in existence now. Somebody stole it.
"X Q. 338. What kind of a scale was that?
1328 "Ans. Similar to the picture on Providence Exhibit 5.
"X Q. 339. Now, those were the only completed scales?
"Ans. That was in my possession, yes.
"X Q. 340. What parts were in the shop?
"Ans. Well, we had a great many drums, rackets, pinions, castings—all parts.
"X Q. 341. How many drums?
"Ans. I have got no idea because I have destroyed a good many of them and I have got a good number left still. I have a good many at home now.
"X Q. 342. About how many have you at home now?
"Ans. I couldn't answer that question for I haven't looked them up. I have got two boxes full of scale matter, two big boxes that are 8 inches square and 2½ feet long, packed full.
"X Q. 343. Have you got any idea how many drums are in there?
"Ans. No; I wouldn't want to say because I haven't looked into them only to give an idea of what is in there.
"X Q. 344. Would you say there are ten?
"Ans. Yes; I think there is.
"X Q. 345. Fifteen?

"Ans. I wouldn't want to state any particular number. I am saying ten judging from the size of the box. I know that it will hold ten.

"X Q. 346. How many rackets and wheels?

"Ans. I couldn't tell you that.

"X Q. 347. What are the rackets and wheels made of, what kind of material?

"Ans. Steel.

"X Q. 348. Do you know how many casings there are there?

"Ans. I don't know; I have got some.

"X Q. 349. What material are they made of?

"Ans. They are wooden casings, cast iron casings, brass casings, and sheet iron casings. That includes these that is here. That is the only brass one.

"X Q. 350. The drums you have there are all wooden ends, are they?

"Ans. All wooden ends, similar to that one.

"X Q. 351. Similar to Providence Exhibit 4 that has been produced here?

"Ans. Yes, sir.

"X Q. 352. When did you start with the confectionery business in Pawtucket?

1329 "Ans. Well, I couldn't answer that question only in a rough way—about thirty years ago. My house burned down some years ago and I lost all my books and records so I don't know when it was started.

"X Q. 353. Well, about 1887?

"Ans. I am simply judging. I know my oldest boy was about a year old at the time.

"X Q. 354. Was that about 1887?

"Ans. About that I should say.

"X Q. 355. And you were called down here by the fact that your father wanted to turn over this business of his to you, whatever it was?

"Ans. No; I got to fooling around, working on an improvement, and father says——

"X Q. 356. An improvement on what?

"Ans. On a scale; I was puttering round and father says, "You had better take the whole business."

"X Q. 357. What improvement were you working on?

"Ans. Well, it is nothing that has ever been used in the scale at all.

"X Q. 358. What kind of an improvement?

"Ans. Well, an impovement to show the figures in a different shape, to show the weight in a different shape.

"X Q. 359. How do you mean, "in a different shape"?

"Ans. So as to bring it up more into a machine that would have a face like a common scale, a dial scale, and it was never anything ever made on the market with them.

"X Q. 360. Now, you say you have seen some of these scales in actual use in Providence, Pawtucket, Central Falls and Attleboro: What scale did you see in actual use in Providence?

"Ans. There was one down on the Dexter street market, I remember.

"X Q. 361. Dexter street?

"Ans. Yes, sir.

"X Q. 362. Who ran it?

"Ans. I don't recollect the man's name.

"X Q. 363. When was that?

"Ans. I should say that was all of 25 or 30 years ago—after I went into the corn business because I sold the man some corn, one time, and saw it hanging up there.

"X Q. 364. That is, you saw the scale hanging?

"Ans. Yes, and being used.

1330 "X Q. 365. Was it a hanging scale?

"Ans. No; it was a cabinet, what we call hanging up, setting on a bracket.

"X Q. 366. It was a cabinet?

"Ans. Yes, sir.

"X Q. 367. Box?

"Ans. Yes.

"X Q. 368. What other scale did you see in Providence, if any?

"Ans. I can't place any other in Providence at present. There was more in here but I can't place them by seeing them myself.

"X Q. 369. Now, what scale in Pawtucket?

"Ans. I saw Mr. Devlin's scale on Pleasant street.

"X Q. 370. Any other?

"Ans. I have seen Mr. Devlin's scale on River street.

"X Q. 371. Was that the same scale?

"Ans. I don't think it was. I couldn't say about that but I don't think that was the same scale. I think it was another one.

"X Q. 372. Were those persons the same Mr. Devlin?

"Ans. Father and son.

"X Q. 373. Any other scale in Pawtucket?

"Ans. Dan Horton's market.

"X Q. 374. And you say he had two?

"Ans. Yes.

"X Q. 375. One box and the other hanging?

"Ans. Yes.

"X Q. 376. What was the Devlin scale?

"Ans. It was a box scale.

"X Q. 377. Were both those Devlin's box scales?

"Ans. I think they were.

"X Q. 378. You knew that Mr. Devlin sold out to his son, didn't you?

"Ans. I don't know whether Mr. Devlin sold out to his son, or whether he sold to somebody else and his son started another market. I know there was, at the Pleasant street store there was other owners and I don't recollect now how that was, whether he sold directly or whether the other market was started separately.

"X Q. 379. Do you recall any other scale in Pawtucket?

"Ans. Well, I know Mr. Davis had a scale. He was in a market

on Pleasant street there, and a Mr. Fallon used the scale, and where they came from I can't say. They were all in there together.

1331 "X Q. 380. How often did you see the Devlin scale?

"Ans. I might say every day or two. For years we traded there.

"X Q. 381. How often did you see the Horton scale?

"Ans. Well, I saw it quite often because it was a place that I was running around at. I couldn't state any definite time.

"X Q. 382. How often did you see the Fallon scale?

"Ans. Well, I saw that quite often.

"X Q. 383. Now, in what years did you see the Devlin scale?

"Ans. That I couldn't say. It was a general thing from 1875, I should judge, up for a good many years afterwards. I have no distinct recollection of any particular dates.

"X Q. 384. When do you recall seeing the Horton scale?

"Ans. Well, that was about somewheres about the same time. It may have been a year or two afterwards or before. I couldn't answer,—the time when they were put in and he kept a store there for some few years.

"X Q. 385. When did you see the Davis scale?

"Ans. Well, I don't have much of a recollection of the Davis scale. I just remember that he had one and I don't remember the history of it, or anything of it.

"X Q. 386. When did you see the Fallon scale?

"Ans. I don't know but what the Davis and Fallon scale are the same scale. That I won't say. One, either Davis sold out to Fallon or Fallon sold to Davis, I don't know how it was.

"X Q. 387. You recall any other scale in Pawtucket?

"Ans. And Mr. Tierney had one, of Pleasant View.

"X Q. 388. How often did you see that?

"Ans. Well, I couldn't say how often. I saw it a number of times there.

"X Q. 389. When?

"Ans. Well, away back somewheres along, somewheres 1875 or 1880. I don't know when. I was not so well acquainted up that way and only went up there with father or something of that sort.

"X Q. 390. Any other scale in Pawtucket?

"Ans. There is some others but I can't place them now.

"X Q. 391. Do you mean there are now?

"Ans. There were at the time but I can't place them now.

"X Q. 392. You can't place where they are?

"Ans. Where they are nor who the parties were that had

1332 them.

"X Q. 393. Have you any recollection of how many?

"Ans. I have not.

"X Q. 394. What is your recollection as to any scale in Central Falls?

"Ans. Well, there was a scale in Central Falls but I can't place it, and at the time this party some years ago was up, I know they traced up a scale there.

"X Q. 395. Did you do it yourself?

"Ans. I was with the party who done it. Mr. Shurtliffe traced it up and we struck the man. Who the man was I don't recollect. I have no recollection of the scale myself.

"X Q. 396. You didn't see the scale?

"Ans. No; I didn't, but we saw the man. The man told us about having it but I don't know personally anything about it.

"X Q. 397. Any other scale in Central Falls?

"Ans. I can't think of any.

"X Q. 398. What scale in Attleboro?

"Ans. That of Raymond.

"X Q. How often did you see that?

"Ans. Not very often, only when I went up with father.

"X Q. 400. Well, when was that?

"Ans. I couldn't say. It was along back, round somewhere in that neighborhood, at the time I was going round with father.

"X Q. 401. That would be 1875?

"Ans. Somewhere round 1875 or 1880, I don't know. I can't place the dates of any of these because I have nothing to refer back to only in a general way.

"X Q. 402. Now, you used the scale yourself in the confectionery business?

"Ans. Yes, sir.

"X Q. 403. Was that a box scale?

"Ans. No, sir.

"X Q. 404. What kind of a scale was it?

"Ans. The first one is that one.

"X Q. 405. You are now pointing to Providence Exhibit No. 1?

"Ans. Yes, sir.

"X Q. 406. That is the scale you used in your confectionery business?

"Ans. Yes, sir.

"X Q. 407. Did you ever have a scale open?

"Ans. Yes, sir.

1333 "X Q. 408. What did you open it for?

"Ans. For the fun of it mostly.

"X Q. 409. You opened it to look into it?

"Ans. Well, I opened it—I put it together originally and if I wanted to set it for a pan I would open it to set it.

"X Q. 410. How do you mean to set?

"Ans. So as to make it balance with the pan. If I wanted to shift the pan I naturally wanted to shift the scale to suit the pan.

"X Q. 411. You opened it to balance it?

"Ans. Yes.

"X Q. 412. Who made the springs for these scales?

"Ans. I couldn't answer that question. I don't know.

"X Q. 413. You don't know where they were obtained?

"Ans. I don't, but I have an idea that the Fairbanks Scale Company made those scales.

"X Q. 414. You mean made the springs?

"Ans. Made the springs.

"X Q. 415. Were any springs turned over to you by your father?

"Ans. Yes, sir.

"X Q. 416. About how many?

"Ans. I couldn't tell you. I have got a lot of them to home now.

"X Q. 417. How did you balance these scales?

"Ans. With a nut at the top where they hung up.

"X Q. 418. That either lengthened it or, what?

"Ans. Lengthened the spring, and then we could take and twist the bearing down into the spring so that it would work down in between and shorten the spring itself.

"X Q. 419. Now, what do you mean by that, lengthen the spring?

"Ans. Well, for instance, if you put a pan on that weighed a pound it would not draw it, the chart down as one that weighed two pounds.

"X Q. 420. It would not make the chart revolve, the sphere?

"Ans. Yes; and we would drop the spring.

"X Q. 421. You would not lengthen the spring itself?

"Ans. No; we would drop it down.

"X Q. 422. You would drop the position of the spring?

"Ans. Yes.

"X Q. 423. Or if the pan was lighter you would elevate the position of the spring?

1334 "Ans. Yes.

"X Q. 424. How did you balance for any variation in the spring itself?

"Ans. Put in a sort of a core that set inside the spring, and that worked down in between the layers, the spring, the catch, so that we could screw that up and down.

"X Q. 425. What did you do to the spring.

"Ans. It would give a different tension on the spring.

"X Q. 426. You had a core by which you could change the tension in the spring?

"Ans. Yes; that is the best way I can describe it to you.

"X Q. 427. What was the shape of the core?

"Ans. We had some that was like a thread and some was a plug with a pin in it and the pin would come out in between the core.

"X Q. 428. Who made those cores?

"Ans. I couldn't say who made them.

"X Q. 429. Was there any way of changing the tension on the spring?

"Ans. No; you mean another way to alter after it is hung up,—there was none.

"X Q. 430. No; I mean to change the tension on the springs so as to allow for a variation in the spring itself?

"Ans. It was all in those two places at the top.

"X Q. 431. All in the core?

"Ans. Yes; or else the way of hanging.

"X Q. 432. That does not change the tension on the spring, to elevate or lower the spring, that simply changes the registry, but I am speaking of the tension of the spring itself.

"Ans. It was just the core and the pin that was in the core.

"X Q. 433. And has either of these scales that core?

"Ans. I guess you will find they have all got it; yes, they have all got that core, I think; I am not certain.

"X Q. 434. Show me the core in this Providence Exhibit 2?

"Ans. (Witness indicates.)

"X Q. 435. That core—it is a spring?

"Ans. No; the core itself is a spindle like and it slips into the spring and then this pin goes in between and some way threaded so it screwed down instead of having this pin.

"X Q. 436. What is the core made of?

"Ans. Made of iron, steel.

"X Q. 437. What did you say about screwing the pin in between the different turns of the spring?

1335 "Ans. Yes.

"X Q. 438. They screw it in further or take it out some distance?

"Ans. Yes.

"X Q. 439. Now, that provided for the tension of the spring itself?

"Ans. Yes.

"X Q. 440. Now, this Defendant's Exhibit, Providence Exhibit 1, is the scale that you used in your confectionery shop?

"Ans. Yes, sir.

"X Q. 441. You put that scale together yourself?

"Ans. Yes, sir.

"X Q. 442. Out of parts you found in your father's shop?

"Ans. Yes, sir.

"X Q. 443. What is the capacity of that scale?

"Ans. I should think that is a 14-pound scale. It is so long since I have examined them that I can't tell, but it is either a 12 or a 14-pound, in the neighborhood of that, sir. We made them for 12 or 14.

"X Q. 444. And what quantities did you weigh on it?

"Ans. As a general thing we weighed about 5 and 6 pounds.

"X Q. 445. And that was weighing for the stock?

"Ans. Yes; for the batches of stock as we were making it up.

"X Q. 446. Making it into confectionery?

"Ans. Yes.

"X Q. 447. Was the scale used for any other purpose?

"Ans. Well, used—anything that happened to come up in the shop, if we needed anything for light weighing, anything that would weigh on it.

"X Q. 448. Did you ever have that scale sealed?

"Ans. No, sir.

"X Q. 449. That never was sealed?

"Ans. No, sir.

"X Q. 450. How did you test it yourself?

"Ans. We had test weights that father had—that he had got on purpose for that business, to set his scales for him.

"X Q. 451. How many test weights did you have?

"Ans. Well, I should say he had in the neighborhood of about a

dozen. They went from an ounce up to, 4 pounds is the
1336 heaviest weight. I have those weights most of them now.

"X Q. 452. Did you test it from the ounce weight?

"Ans. Yes; every scale was tested from two ounces up.

"X Q. 453. From 2 ounces up?

"Ans. Yes.

"X Q. 454. Do you know what was then the tolerance of a scale?

"Ans. I don't.

"X Q. 455. And you don't know what the tolerance of a scale was when that mark was put on Providence Exhibit 3?

"Ans. I don't.

"X Q. 456. I mean, the sealing mark?

"Ans. I don't.

"X Q. 457. You don't know anything about that?

"Ans. No, sir. I never knew, and I don't know what it is today.

"X Q. 458. How did you read this scale?

"Ans. Well, we looked at the price of one pound, on the face plate and the figure that was opposite would be the price it came to, the figure that was on the drum turned round and came up opposite the face plate in front of the price we wanted.

"X Q. 459. That is to say, you looked at the number of pounds and ounces at the right hand side of the opening to tell you the weight?

"Ans. Yes, sir.

"X Q. 460. And the figures that were opposite that you took for the price?

"Ans. Yes.

"X Q. 461. Did you have any indicator on the scale to mark when the scale was in balance?

"Ans. Well, when it came round to a start we supposed it was all right, it started up right—it didn't follow right.

"X Q. 462. The scale was balanced on zero, of course?

"Ans. Yes.

"X Q. 463. Did you have any indicator on the scale pointing at zero when the scale was in balance with anything on the scale?

"Ans. No; there was no indicator on those scales.

"X Q. 464. You just guessed at it from its position in the slot?

"Ans. When the scales were sold there was a piece of silk
1337 thread behind the glass, in the latter part of it, so that they would have a line.

"X Q. 465. When was that silk thread put on?

"Ans. That I couldn't say, but the first part they just went with the slot themselves.

"X Q. 466. Was the slot finished with glass?

"Ans. Well, all of the latter part had glass in.

"X Q. 467. What do you mean by "All the latter part"?

"Ans. Well, first along, I guess they didn't have any glass, the first one or two.

"X Q. 468. This scale, Providence Exhibit 1 has no glass?

"Ans. I know it was made for a glass but never one put in there.

"X Q. 469. Providence Exhibit No. 2 has no glass: That is not made for a glass, is it?

"Ans. I think that is one that didn't have the glass in. That one had the glass.

"X Q. 470. Indicating Providence Exhibit 3.

"Ans. That scale was made for glass; that was not.

"X Q. 471. You are referring to Exhibit No. 1 now, Providence Exhibit 1?

"Ans. Yes; and there are slots on the end of the glass to slide through.

"X Q. 472. When did you quit using this Providence Exhibit No. 1?

"Ans. At the time the litigation that Howsen & Howson—they borrowed the scales.

"X Q. 473. And when was that?

"Ans. I couldn't tell you; that was—I don't know what the date was. It was some ten years ago; I guess it was more than ten years ago, thirteen or fourteen years ago.

"X Q. 474. To whom did you deliver your scale?

"Ans. To the firm of Howson & Howson.

"X Q. 475. Where did you deliver it?

"Ans. Down in Pawtucket, Lee's Block.

"X Q. 476. It was in Pawtucket somewhere?

"Ans. Yes.

"X Q. 477. What was the name of the person to whom you delivered it?

"Ans. Well, I can't say whether it was Mr. Howson or not, but it was for the firm of Howson & Howson.

"X Q. 478. Did you put any mark on it when you delivered it?

1338 "Ans. I didn't; only I knew the scale. It is the only scale that ever was built of that description, of a brass covering.

"X Q. 479. That is the only scale that was ever delivered of this description?

"Ans. Yes, sir.

"X Q. 480. Or ever made?

"Ans. Or ever made with the brass on, to my knowledge.

"X Q. 481. So then, you put no mark on it of any kind so that you would know by the mark that you received it back?

"Ans. There was no mark any more than what you see there with the name on it. I made no special mark on it.

"X Q. 482. Now, how many years was that out of your possession?

"Ans. Well, I guess it was all of ten years; I wouldn't want to say.

"X Q. 483. Ten years it was gone?

"Ans. Yes.

"X Q. 484. And where did you receive it again?

"Ans. I got it back by sending to Howson & Howson. It came back from Washington.

"X Q. 485. How did it come back?
"Ans. By express.
"X Q. 486. Did you see it in those ten years?
"Ans. I did not.

(At this point 1 p. m., a recess is taken until 2 p. m.)

Afternoon Session.

"Mr. Meads: Mr. Zane, in order that you may have as much notice as can be given to you, in addition to the witnesses whose names have heretofore been given you, we propose to take the deposition of Daniel Fallon, G. H. Tierney, Joseph McNally and —— Green, City Sealer of Pawtucket, his Christian name I have not, and —— Raymond, son of William Raymond, all of these being residents of Pawtucket, except Mr. Raymond who is a resident of Attleboro.
"Mr. Zane: We object to the notice because it is not sufficient.

1339 Cross-examination of T. Z. PHINNEY is resumed, as follows, by Mr. Zane:

"X Q. 487. Where is the pan that belongs to Providence Exhibit 1?
"Ans. I couldn't answer that question. It has been lost a number of years.
"X Q. 488. Since you received this scale back, after it had been absent ten or twelve years, you made no use of it, have you?
"Ans. No, sir.
"X Q. 489. Now, the scale, Providence Exhibit 1, is the same scale, in its interior arrangement, as Providence Exhibit 2, is it?
"Ans. Yes, sir.
"X Q. 490. Where did you first see Providence Exhibit 2?
"Ans. In my father's shop at Pawtucket.
"X Q. 491. What time was that?
"Ans. I couldn't place the definite time.
"X Q. 492. Well, about when?
"Ans. Well, I have no way of stating any time, only 25 or 30 years ago.
"X Q. 493. That is the nearest you can come to it, is it?
"Ans. Yes.
"X Q. 494. Did it have a pan on it then?
"Ans. Well, we had the pans away in the shop, and when we sent a scale out the pan was put on it at the time.
"X Q. 495. Well, this particular scale?
"Ans. They all had pans when they went out.
"X Q. 496. Did it have a pan on it when you first saw it?
"Ans. No; it was in the rough, just as it is now. When we wanted to fit it up we fitted pans on to it.
"X Q. 497. I am talking about this scale, not some other scale but this one: This you first saw in your father's shop?
"Ans. Yes, sir.
"X Q. 498. Do you know where it came from there?

"Ans. I don't.

"X Q. 499. Now, this is one of the scales you sent to Washington, is it?

"Ans. Yes, sir.

1340 "X Q. 500. Did you put any distinguishing mark upon it when you sent it?

"Ans. I did not.

"X Q. 501. And it was gone there ten or twelve years?

"Ans. Yes, sir.

"X Q. 502. You did not see it in that time?

"Ans. No, sir.

"X Q. 503. And now you have no way of distinguishing that this is the scale you sent beyond your recollection of the scale itself?

"Ans. Nothing more than a man would know what he had worked on himself, all his life.

"X Q. 504. You did not work on that scale all your life, did you?

"Ans. We have had to work on them.

"X Q. 505. This particular scale?

"Ans. That particular scale, I can't say that I did.

"X Q. 506. You never worked on that at all?

"Ans. No.

"X Q. 507. When you sent it to Washington did it have a pan?

"Ans. No, sir.

"X Q. 508. When you first saw the scale what was first being done with it—just lying in the shop?

"Ans. Just lying in the shop.

"X Q. 509. Did you ever see it used?

"Ans. I can't say as I did; I am not positive.

"X Q. 510. Now Providence Exhibit 3: Where did you first see that scale?

"Ans. Well, I should judge about 1870, or 1871, or 1872.

"X Q. 511. And where was it when you first saw it?

"Ans. In the house; well, I saw it being put together in the shop first, then, after it was finished, it was put up in the house.

"X Q. 512. And did it remain in the house constantly until it was sent to Washington?

"Ans. Yes, sir.

"X Q. 513. You have seen that scale used, have you?

"Ans. Yes, sir.

"X Q. 514. Where is the scale part of it?

"Ans. I couldn't tell you. It is lost—you mean, the pan part?

"X Q. 515. No; the scale part.

"Ans. The scale part is inside. It is all there.

1341 "X Q. 516. All there?

"Ans. Yes, sir.

"X Q. 517. The spring there?

"Ans. Everything except the pan.

"X Q. 518. Did you ever use that scale yourself—Providence Exhibit 3?

"Ans. Yes, sir.

"X Q. 519. For weighing, what?
"Ans. Everything that came into the house.
"X Q. 520. Well, what were some of the things?
"Ans. Sugar, beef steak, corned beef, cabbage.
"X Q. 521. What is the capacity of that scale?
"Ans. I don't recollect whether there was 12 or 14 pound scales. They are all the same. There is only two sizes made.
"X Q. 522. How closely did you get to that scale in order to read it?
"Ans. That depends on the man's eyesight. I have seen the time that I could read that scale ten feet off, but I couldn't read it now two feet off.
"X Q. 523. You say you could once read that scale ten feet away?
"Ans. Yes, sir; or a newspaper either.
"X Q. 524. Referring to Providence Exhibit 4: Is this one of the scales that was sent to Washington?
"Ans. No, sir, I don't think it is, though I can't say. I wouldn't want to say it was because it was packed in with a lot of others, therefore, I couldn't place it. There were some charts sent to Washington but I wouldn't want to claim that was the particular one.
"X Q. 525. Now, this is made for a scale of, what capacity?
"Ans. If I recollect right those were 24 pounds.
"X Q. 526. Thirty, is it not?
"Ans. I don't know; think it is 24. I cant tell by looking. (Witness examines the exhibit.) Thirty pounds. I was thinking it was 24.
"X Q. 527. What are the weight graduations on it?
"Ans. Four ounces.
"X Q. 528. Every 4 ounces.
"Ans. Yes, sir.
"X Q. 529. That is graduated to a quarter of a pound?
"Ans. Yes, and the smaller scale to 2 ounces.
1342 "X Q. 530. Now, this drum consists of two separate parts as all other drums do?
"Ans. Just the head; the head—calling the head one part—and the paper the other part.
"X Q. 531. No; there are two drums here, separate?
"Ans. Yes, two drums separate.
"X Q. 532. And each of these two drums has a head?
"Ans. Yes, sir.
"X Q. 533. And that head is of wood?
"Ans. Yes, sir.
"X Q. 534. And the head is reenforced by wooden post behind it?
"Ans. Some was and some was not.
"X Q. 535. This particular one?
"Ans. That particular one is reenforced.
"X Q. 536. The chart itself is how much larger in diameter—the drum itself is how much larger in diameter than the smaller drum?
"Ans. I couldn't tell you.
"X Q. 537. Are the figures larger or smaller?

"Ans. Larger, I believe.
"X Q. 538. That was to make it more easily read?
"Ans. Yes, sir.
"X Q. 539. Did you ever use this drum in a scale?
"Ans. I can't say that I have seen that particular drum in a scale but I have seen drums similar to it in a scale.
"X Q. 540. Now, were you ever with your father when he sold a scale?
"Ans. Yes, sir.
"X Q. 541. To whom?
"Ans. Well, I can't remember any particular occasion now.
"X Q. 542. Can you remember a person when you were present, when you were present and a scale was sold to that person?
"Ans. I can't say I can, not distinctly. I know I used to go with him, but any particular occasion, I can't remember of.
"X Q. 543. Have you any distinct recollection of a sale made by your father when you were present?
"Ans. Well, not so to call it to mind the particular person it was sold to.
"X Q. 544. Can you remember the place?
1343 "Ans. No; I can't that is, not anything that I could put right down to a certain time.
"X Q. 545. Was it in Pawtucket?
"Ans. I know I have been with him in places in Pawtucket but what particular time I can't remember.
"X Q. 546. You can't remember time, nor place, nor person?
"Ans. Nothing special.
"X Q. 547. Well, can you remember the time, place or person of any sale made by your father, when you were present, or that you have personal knowledge of?
"Ans. I know I was with him but I can't place the particular time.
"X Q. 548. When you brought this Providence Exhibit 4 here, where did you find it? Where did you get it?
"Ans. It came from my home.
"X Q. 549. Well, where in your home?
"Ans. In my cellar packed away in a case there.
"X Q. 550. In a box?
"Ans. Yes,, sir.
"X Q. 551. Along with other drums?
"Ans. Yes, sir.
"X Q. 552. And they were drums that had been left you by your father?
"Ans. Yes, sir.
"X Q. 553. And I understand you to say you can't tell where this drum has been in the meantime, whether it was in Washington, or not?
"Ans. I couldn't say whether it was in Washington, or not.
"X Q. 554. You have no identifying mark on this drum?
"Ans. No; I have not, and that is the reason I can't tell because

there is nothing to identify it from the other drums that I had, and they were all put together.

"X Q. 555. Now Providence Exhibit 5: Where did you get this paper?

"Ans. It is one my father left me amongst the other scale matters that was given to me.

"X Q. 556. Where did you get it when you brought it here?

"Ans. From my house.

"X Q. 557. Had it been there all the time?

"Ans. It had been there ever since I have lived in Providence, about fourteen or fifteen years; before that it was out in Pawtucket, at the Pawtucket home.

1344 "X Q. 558. Was it in a box?

"Ans. Yes, sir.

"X Q. 559. Along with the rest of your parts?

"Ans. Yes, sir.

"X Q. 560. Who made the correction on this circular?

"Ans. That is something that—there was a mistake in the printing.

"X Q. 561. I said, who made that correction?

"Ans. I am trying to tell you.

"X Q. 562. Who put down those figures?

"Ans. My father put them down because there was a mistake in the date.

"X Q. 563. I didn't ask you why he did: How do you know that he put them down?

"Ans. I don't know only that he gave them to me with them all crossed off on the whole lot.

"X Q. 564. You don't recognize that as being his handwriting?

"Ans. I don't, because I never looked at it. I know the first time they was ever passed me they was all marked off.

"X Q. 565. There is no year inserted instead of "1863" there?

"Ans. No; because that is the date of a diploma and we have the diploma at home.

Mr. Zane: I move to strike out the answer as not responsive.

"X Q. 566. But the two figures "63" are simply crossed out here?

"Ans. I have not looked at it to see so I can't answer.

"X Q. 567. Look at it to see.

"Ans. I can't make out what it was "18—"—something—it is crossed off.

"X Q. 568. This paper that is marked Providence Exhibit 6: Where did you get this when you brought it here?

"Ans. At home.

"X Q. 569. Where?

"Ans. At 200 Indiana avenue, Providence, Rhode Island.

"X Q. 570. What particular place in your home was it when you found it?

"Ans. Down in a box with the rest of the scale material.

"X Q. 571. Did you ever deliver one of these papers, Providence Exhibit 6, yourself, to anybody?

"Ans. I have delivered a good many of them round.
1345 "X Q. 572. To whom?
"Ans. I couldn't say, but I used to pass them out when I was exhibiting the scale to anybody that was interested.
"X Q. 573. Now, where were you exhibiting the scale?
"Ans. I exhibited it to the Agricultural Fairs—Attleboro, Narragansett—Narragansett Park—Woonsocket, Taunton Fair.
"X Q. 574. Now, when did you exhibit it at Attleboro?
"Ans. I couldn't tell you, it is so many years ago.
"X Q. 575. More than once?
"Ans. I don't think I went to Attleboro Fair more than once.
"X Q. 576. When did you exhibit at Narragansett Park—you say?
"Ans. Yes.
"X Q. 577. Where is that?
"Ans. That was an Agricultural Fair that was held in Rhode Island, here in Providence, just outside of Providence.
"X Q. 578. When did you exhibit it at Narragansett Park?
"Ans. I couldn't tell you that, it is so long ago.
"X Q. 579. How many times? How many different times?
"Ans. I think we were out there—it seems to me I was out two years there with it: I won't say that I was.
"X Q. 580. When did you exhibit it at Taunton?
"Ans. I don't think I was but once there.
"X Q. 581. How many times did you exhibit it at Woonsocket?
"Ans. I think once.
"X Q. 582. Were you alone, or your father with you?
"Ans. I was alone. My father was with me at Narragansett, part of the time.

Redirect examination.

By Mr. Meads:

"R. D. Q. 583. Mr. Phinney, in answer to a question put to you by counsel for the plaintiff you spoke of your father testing these scales before he sent them out: Just what did he do by the way of testing these scales?
"Ans. He had two or three sets of weights that he had gotten, tested weights through some sealer or somewhere, I don't know where he got them. They were tested, supposed to be perfectly accurate,
1346 and he would take and start with an ounce weight and get up until he got the whole capacity of the scale and he would throw them on, in all weights, then he would leave them, let them hang, sometimes for a day or two, and see if the spring came back in its proper place, and try them in all different shapes. Those weights—I have some of them at home, but, of course, at the present day they would not be accurate as they are all rusty, but at the time he took great pains to keep them so that they would not vary any, and every scale that went out was carried and he had it sealed before he sold the scale.

"R. D. Q. 584. Carried where?
"Ans. To the sealer of Weights & Measures.

Recross-examination.

By Mr. Zane:

"R. X Q. 585. Did you ever take a scale to the sealer?
"Ans. Yes, sir; I have.
"R. X Q. 586. What scale was that?
"Ans. I couldn't say what scale it was.
"R. X Q. 587. How many did you take?
"Ans. I have been known to carry them down. I can recollect two or three times that I went down.
"R. X Q. 588. You can recollect two or three times that you took a scale to the sealer?
"Ans. Yes, sir.
"R. X Q. 589. Do you know to whom the scale went?
"Ans. Well, I have carried a scale to I think his name was John Potter.
"R. X Q. 590. What is that name?
"Ans. I think it was John Potter. We used to call him old Mr. Potter.
"R. X Q. 591. That was the sealer?
"Ans. That was the sealer.
"R. X Q. 592. Did you deliver that scale after it was sealed?
"Ans. No, sir.
"R. X Q. 593. Did you see it delivered?
"Ans. No, sir; that is nothing that I can claim to have seen.
"R. X Q. 594. Can you recollect any time when you took a scale to have it sealed that you ever delivered it yourself, or saw it delivered to any customer?
"Ans. I can't say that I do.
"R. X Q. 595. Why did you say that every scale, before it was sold, was carried to the sealer of weights and measures and sealed?
1347 "Ans. Because father was under the impression that it made the scale more valuable if it was sealed by the sealer of weights and measures.
"R. X Q. 596. You were not there yourself; You did not see it sealed, nor did you see it delivered to any customer, you say?
"Ans. No; but they put their stamp on it which he considered good evidence that the scale was right.
"R. X Q. 597. Exactly: But how do you know?
"Ans. I don't know.
"Mr. Zane: I move to strike out witness's statement in regard to every scale, "before it was sold that it was carried to the sealer of weights and measures and sealed by him."
"R. R. D. Q. 598. (By Mr. Meads.) Mr. Phinney when these scales were sealed, what did your father do with them?
"Mr. Zane: We object. He has already said he had not seen any. We object to this evidence because it is bringing in what this

witness does not know about, and he has already stated that it is hearsay.

"Ans. He delivered them to the purchasers.

"R. R. D. Q. 599. (By Mr. Meads.) Were there any instances in which, after they were sealed, he brought them back to the shop?

"Ans. Well, he most always would seal them and bring them back and then go and deliver them.

"R. R. D. Q. 600. Did you see any of those scales after they were brought back from the sealer?

"Ans. Yes, I have.

"R. R. D. Q. 601. Was there anything on those scales that indicated to your mind that they had been taken to the sealer?

"Ans. Yes; they had on a seal similar to that seal on them.

"R. R. D. Q. 602. When you say "similar to that" you mean, similar to the seal on Providence Exhibit 3?

"Ans. Yes, sir.

"R. R. D. Q. 603. Did you, yourself, see more than one of those?

"Ans. Yes, sir.

"R. R. D. Q. 604. Where did you see those which you saw that had a seal?

"Ans. Well, I saw the seals when they would come home and I have seen the scales sealed in the stores, where I have seen the seals on them.

1348 "R. R. X Q. 605. (By Mr. Zane.) How many did you see in your father's shop, sealed?

"Ans. I couldn't answer that question as he had them all sealed before they were carried out.

"R. R. X Q. 606. Well, how many did you see?

"Ans. I couldn't say because I can't remember how many scales he made and sold.

"R. R. X Q. 607. Can you give us any idea of any number that you saw sealed and brought back to your father's shop?

"Ans. No, sir; I wouldn't want to state any number because I don't have any recollection.

"R. R. X Q. 608. Were there as many as five?

"Ans. Yes, sir; certainly.

"R. R. X Q. 609. Do you know, of your own knowledge, whether those scales were delivered to any purchaser?

"Ans. I knew they were sold somewheres.

"R. R. X Q. 610. Did you know that of your own knowledge?

"Ans. Yes, sir.

"R. R. X Q. 611. How did you know it?

"Ans. Because I knew that the scale was made up and my father said it was sold, and he went, finished it, carried it off—I knew it was sold.

"R. R. X Q. 612. All you know about it is you saw him take the scale away?

"Ans. It was delivered.

"R. R. X Q. 613. You didn't see it delivered?

"Ans. No; sometimes I did but I can't recollect any particular time nor person.

"R. R. X Q. 614. Now, in whose store did you see the scale sealed?

"Ans. I saw a scale that was sealed in Mr. Devlin's store, Mr. Fallon's store, Mr. Horton's store and Mr. Tierney's; every one of those scales were sealed.

"R. R. X Q. 615. How long ago was it you saw that seal?

"Ans. I couldn't tell you.

"R. R. X Q. 616. Well, as close as you can?

"Ans. It is so many years back——

"R. R. X Q. 617. How many years ago?

"Ans. Well, I should say from now it would be 35 or 40 years, about 30 to 35 years back.

"R. R. X Q. 618. What was the name of the sealer?

"Ans. John Potter is the sealer.

"R. R. X Q. 619. On those particular scales?

"Ans. Well, I can't tell, but I think those were under Mr.
1349 Crawford's administration—sealer of weights and measures. John Potter was the oldest one.

"R. R. X Q. 620. Did you have any distinct recollection of the name of the sealer that was on the scale?

"Ans. James Crawford—I think his name is James. I knew the man but I can't place him now.

"R. R. X Q. 621. You say you recollect that name on the scale?

"Ans. Yes, sir.

"R. X Q. 622. As the name of the sealer?

"Ans. I won't say it is James, but I think it was James.

"R. R. X Q. 623. Do you know when this mark was put on this Providence 3 which is claimed to be the name of the sealer?

"Ans. That was put on so many years back that I can't remember. It was put on in the administration of Mr. Potter. It was away back, away along in the seventies. I don't have any recollection of its going on but recollect of its always being there.

"R. R. X Q. 624. How long was that out of your custody?

"Ans. The time it went to Washington.

"R. R. X Q. 625. How many years?

"Ans. Oh! I am guessing at it—about ten years.

(By Mr. Meads:)

"R. R. D. Q. 626. Mr. Phinney, when that scale, Providence Exhibit 3, left your custody was that seal which purports to have been put on there by Mr. Potter, on that exhibit at that time?

"Ans. It was to my best recollection.

"R. R. D. Q. 627. Is that scale, so far as that seal is concerned, in the same condition now as it was when it left your custody?

"Ans. Just the same.

"R. R. D. Q. 628. At the time that you sent these scales to Washington did you give a deposition?

"Ans. I did.

"R. R. D. Q. 629. Did your father give a deposition?

"Ans. He did.

"Mr. Meads: Mr. Zane, I ask you to produce the depositions heretofore given by Mr. Thomas Z. Phinney and William H. Phinney, in a certain cause in which the Computing Scale Company was complainant and Landers, Ferris & Clarke and the Federal Scale Company were defendants, and in which case the depositions in
1350 question were given by Mr. Phinney, this witness, and his father, as he has just testified.

"Mr. Zane: Why do you call to me to produce them?

"Mr. Meads: You are solicitor for the complainant in this case.

"Mr. Zane: The complainant did not take the depositions. You know perfectly well they are in the court if they were taken.

"Mr. Meads: The reason for asking you to produce these depositions is that by stipulation of counsel in that case, in which your client was a party, the depositions in question were not filed.

"Mr. Zane: I have no proof of that at all, and your statement there was such a stipulation, why, I have no reason to believe to be true.

"John H. Devlin.

"JOHN H. DEVLIN, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?

"Ans. John H. Devlin.

"Q. 2. Where do you live?

"Ans. Pawtucket, Rhode Island.

"Q. 3. What is your age?

"Ans. Seventy-one.

"Q. 4. How long have you been a resident of Pawtucket, Rhode Island?

"Ans. I was born in Pawtucket.

"Q. 5. Lived there continuously?

"Ans. Practically lived there all my life.

"Q. 6. Who was your father?

"Ans. John Devlin.

"Q. 7. Is your father alive?

"Ans. No, he is not.

"Q. 8. When did he die?

"Ans. In the spring of 1902.

"Q. 9. What was the business of your father?

"Ans. Well, when he gave up business last he was in the meat business.

"Q. 10. How long had he been in the meat business?
1351 "Ans. Well, the last, about as I remember, in the meat business, was about '69, I think, when I first remember when I helped him at that time.

"Q. 11. Where, in Pawtucket, was he in the meat business?
"Ans. On Pleasant street.
"Q. 12. Do you know the number on Pleasant street?
"Ans. 18.
"Q. 13. After he gave up the meat business who succeeded him?
"Ans. I did.
"Q. 14. Did you do business at 18 Pleasant street?
"Ans. Yes, sir.
"Q. 15. Did you do business anywhere else than 18 Pleasant Street?
"Ans. Later on, yes.
"Q. 16. Where?
"Ans. 78 River street.
"Q. 17. How old were you when you began to help your father in his shop at 18 Pleasant street?
"Ans. About twenty-four.
"Q. 18. Have you any recollection of the scales that were in his market when you started to help him in the meat business at 18 Pleasant street?
"Ans. Yes, sir.
"Q. 19. Do you see, in this room anywhere, a scale similar to any that he had?
"Ans. Yes, sir.
"Q. 20. What scale is that?
"Ans. That is it.
"Q. 21. Providence Exhibit No. 3?
"Ans. Providence Exhibit No. 3.
"Q. 22. Did the scale which he used in his business at 18 Pleasant street have a metal or a wooden case?
"Ans. Wooden case.
"Q. 23. Did the case have two openings above, as this has?
"Ans. Yes, sir.

"Mr. Zane: Don't lead him. Let him describe.

"By Mr. Meads:

"Q. 24. Where did that scale stand in your father's shop?
"Ans. It stood on two brackets up against the wall, against the counter, same as this (indicating table) is the counter, and this is the wall, on some brackets, and there was a pan hung in between the brackets.
1352 "Q. 25. When, as near as you can state, did your father get such a scale?
"Ans. He had one of the first that was ever patented by Mr. Phinney; I should think it was about '70.
"Q. 26. When did you start business at 78 River street?
"Ans. 1885.
"Q. 27. Was it before 1885 that your father had a scale such as you have described?
"Ans. Before.
"Q. 26. Do you know from whom he purchased such a scale?

"Mr. Zane: Of your own knowledge.

"Ans. Yes, William H. Phinney.

"By Mr. Meads:

"Q. 29. Do you know what he paid for the scale?

"Ans. $10, if I remember right that is what he paid him for them.

"Q. 30. How long was that scale in use in that market at 18 Pleasant street?

"Ans. The one that he had I continued to use and used it for about ten years from that date, from '70 or '80 or '81; about '81 I think that I gave up in that place.

"Q. 31. Did you, yourself, use that scale for ten years?

"Ans. Yes, sir.

"Q. 32. Tell your experience with that scale during that time?

"Ans. I found it very convenient for weighing any kind of a piece of meat, or vegetables, anything of that kind. When you put on the meat, whatever it was, it gave the pounds and ounces and also the price, and it very accurate.

"Q. 33. Was that scale ever inspected by any one during the time you had it?

"Ans. The sealer of weights and measures.

"Q. 34. The sealer of weights and measures of what place?

"Ans. Pawtucket, Rhode Island.

"Q. 35. More than once?

"Ans. Every year he came around, sometimes twice, because they had the fees. They were supposed to come once a year.

"Q. 36. What experience did you have with any other so called Phinney scales?

"Ans. I purchased one myself from Mr. Phinney, similar.

1353 "Q. 37. When did you purchase your scale from Mr. Phinney?

"Ans. I can't give the date, but between, I should think, 1871 and 1875 somewhere.

"Q. 38. Were you in business then for yourself?

"Ans. Yes, sir.

"Q. 39. Where?

"Ans. 18 Pleasant street.

"Q. 40. That was after you succeeded your father?

"Ans. Yes.

"Q. 41. You had two Phinney scales at one time, had you?

"Ans. Yes, sir.

"Q. 42. What was the character of the second Phinney scales which you purchased?

"Ans. A fac-simile of the other.

"Q. 43. Like Providence Exhibit 3?

"Ans. Yes.

"Q. 44. How long did you use that scale?

"Ans. Well, it had been in use for a great many years. I think I used it myself something like 25 or 26 years.

Q. 45. What was your experience with that scale?

"Ans. It was very good. I found it very accurate, and it gave accurate weight and price all figured out, and gave good satisfaction to the customers.

"Mr. Zane: I move to strike out the statement "Gave good satisfaction to the customers."

"By Mr. Meads:

"Q. 46. Was that second scale ever inspected by any public official?
"Ans. Yes, sir.
"Q. 47. If so, by whom?
"Ans. James Crawford.
"Q. 48. Who was James Crawford?
"Ans. He was City Sealer of Weights & Measures, State Sealer too, later on, the State Sealer of Weights & Measures, at that time, and I presume by Mr. Potter, but I can't say.

"Mr. Zane: I move to strike out his statement, "I presume by Mr. Potter".

"By Mr. Meads:

"Q. 49. Did you know Mr. John H. Potter?
"Ans. Yes, sir.
"Q. 50. Where did Mr. Potter live when you knew him?
"Ans. Walcott street.
1354 "Q. 51. In what place?
"Ans. Pawtucket, Rhode Island.
"Q. 52. What was his business or occupation?
"Ans. He was an old gentleman. He was retired from business at that time. He was Town Sealer at that time.
"Q. 53. Is Mr. John H. Potter now alive?
"Ans. No, sir.
"Q. 54. Do you know approximately how long he has been dead?
"Ans. No; quite a few years.
"Q. 55. Did both of these scales which you have described as being used by you stand on brackets on the wall?
"Ans. Yes, sir.
"Q. 56. With a pan suspended underneath?
"Ans. Pans suspended.
"Q. 57. When you ceased business at 78 River street to whom did you sell, if to any one?
"Ans. 78 River street?
"Q. 58. Yes.
"Ans. I sold out to my nephew, William H. Gillan.
"Q. 59. At that time was there any scale in the place?
"Ans. Not at that time, no, sir, not in use.
"Q. 60. Before you sold out to Mr. William H. Gillan what had Mr. Gillan been doing?
"Ans. Working for me.
"Q. 61. How long had he been working for you?
"Ans. Well, sixten or seventeen years.

"Q. 62. Where does Mr. William H. Gillan now live?
"Ans. Pawtucket, Rhode Island.

Cross-examination.

By Mr. Zane:

"X Q. 63. Mr. Devlin did you make an affidavit on the second day of January, 1913, at Pawtucket, before Felix F. Thurm, Notary Public?
"Ans. Yes, sir.

"Mr. Zane: We now call upon you to produce that original affidavit.
"Mr. Meads: I haven't the original affidavit.
"Mr. Zane: That is your answer to the notice to produce it?
"Mr. Meads: Well, that would be my inference.
"Mr. Zane: You have no other answer to make?
"Mr. Meads: No.

1355 "By Mr. Zane:

"X Q. 64. Now, in regard to that affidavit you stated that you were sixty-seven years of age, a resident of Pawtucket, Rhode Island, and the sone of John Devlin who died some twelve years ago, didn't you?
"Ans. Yes, sir.
"X Q. 65. So that would make his death take place in 1901?
"Ans. Well, '1 or '2, I think it was in the spring of '2.
"X Q. 66. He died in the spring of 1902?
"Ans. Yes, sir.
"X Q. 67. You also deposed in that affidavit that John Devlin had operated a meat and provision market at 78 River street, Pawtucket, Rhode Island.
"Ans. Yes, sir.
"X Q. 68. And that you succeeded him as proprietor of this shop about twenty-six years old, having previously assisted your father in carrying on the business?
"Ans. Yes.
"X Q. 69. That would make your succession to his business 1887, would it?
"Ans. Well——
"X Q. 70. When was it you succeeded him?
"Ans. I succeeded him in 1901 or 1902, in the first time, and then he started again for himself.
"X Q. 71. Exactly: But when did you suceed him at 78 River Street?
"Ans. The building was there but he had given up the business and I started to open it up anew in 1885.
"X Q. 72. When you started at 78 River street?
"Ans. 78 River Street.
"X Q. 73. Now, did you state in that affidavit, "I remember that there was in use in the store at the time I succeeded my father a

weighing and computing scale known as the Phinney scale": Did you state that?

"Ans. Yes, sir.

"X Q. 74. "I remember that the casing was wood and somewhat different in design from that of the exhibit scale"—the scale that was there at the time?

"Ans. Yes, sir.

"X Q. 75. "But in all other respects it was substantially identical therewith": Did you state that?

"Ans. Yes, sir.

"X Q. 77. You said nothing, in that affidavit, about a second scale, did you?

1356 "Ans. No; they never asked me. They had the scale there at that time, and we had one later.

"X Q. 78. You said nothing in this affidavit about that second scale, did you?

"Ans. He was talking about my father's business. I told him I had the scale there.

" XQ. 79. In this affidavit did you say anything about any other scale than the one you got from your father?

"Ans. No, I don't think I did.

"X Q. 80. Now, did you say anything, in that affidavit, about the scale being sealed?

"Ans. I don't think so.

"X Q. 81. Did you say anything, in that affidavit, about the scale being operated, whether it operated well or not?

"Ans. I don't think so; he never asked me and I didn't say anything.

"Mr. Zane: I move to strike out his statement "he never asked me," as not responsive.

"X Q. 82. Now, how many times did you succeed your father in business?

"Ans. Well, I didn't know as you could call it succeed. I bought him out, the first time, about '71.

"X Q. 83. Let us finish with that: In '71 you bought him out?

"Ans. Yes, sir.

"X Q. 84. Where was he doing business at that time?

"Ans. 18 Pleasant street.

"X Q. 85. Did he begin business again?

"Ans. Not right after.

"X Q. 86. Did he begin business again?

"Ans. Yes.

"X Q. 87. When?

"Ans. I think it was '75.

"X Q. 88. And where did he begin business?

"Ans. He built a building on his own land at 78 River street.

"X Q. 89. Did he continue business there?

"Ans. For a while, yes, sir.

"X Q. 90. The same kind of business that he had carried on before?

"Ans. Yes, sir.
"X Q. 91. Then did you take over that business?
"Ans. Well, after; I didn't take it from him because he
1357 had got too old and the business was closed up. I opened up anew.
"X Q. 92. To whom did he sell the business, if to any one?
"Ans. I think it was a man—well, I couldn't tell you. There were two men in there, one man named Clarner—whether he sold it to him, or another—at any rate they went out and the place was closed when I took hold of it.
"X Q. 93. So that in 1871 you succeeded your father in business?
"Ans. About, I should think it was, '71.
"X Q. 94. Did he then have a Phinney scale?
"Ans. Yes, sir.
"X Q. 95. How long did you use that scale?
"Ans. Practically ten years.
"X Q. 96. What became of it?
"Ans. I think I left it in the building when I sold out.
"X Q. 97. You sold out in 1881?
"Ans. About that.
"X Q. 98. And you sold to whom?
"Ans. To Frank Mitchell.
"X Q. 99. How long did Mitchell run the business?
"Ans. A short time.
"X Q. 100. What?
"Ans. A short time, I couldn't say.
"X Q. 101. Well, about how long?
"Ans. Less than a year, I think.
"X Q. 102. And who succeeded Mitchell?
"Ans. I think it was Mr. McDuff and Fallon.
"X Q. 103. Who succeeded them?
"Ans. Mr. Davis, I think.
"X Q. 104. A man named Davis?
"Ans. Yes.
"X Q. 105. Now, when did you succeed your father in business at 78 River street?
"Ans. You mean, when did I start the business for myself?
"X Q. 106. Yes.
"Ans. In 1885.
"X Q. 107. Did you find a Phinney scale in that store?
"Ans. Yes, sir.
"X Q. 108. Was that the same scale as had been in the
1358 other store?
"Ans. One of the same, not the one that I sold to them. I had moved one.
"X Q. 109. You had moved one of those scales?
"Ans. Yes, sir.
"X Q. 110. That one scale you bought from Phinney, yourself?
"Ans. Yes, sir.
"X Q. 111. In what year?

"Ans. Well, I couldn't say: Before '75, between one and seventy-five.

"X Q. 112. Between 1871 and 1875?

"Ans. Yes.

"X Q. 113. That was a scale in a wooden box?

"Ans. Yes, sir.

"X Q. 114. And was supported by brackets?

"Ans. Yes, sir.

"X Q. 115. And a pan hung below the brackets?

"Ans. Yes, sir.

"X Q. 116. It was on the wall behind the counter?

"Ans. The benches in the market—this was a market, and the counter just the same as this (referring to table). There was a counter—a wall there, it hung right facing you. We didn't have no counters.

"X Q. 117. It hung behind the bench?

"Ans. Over the bench same as you may have this over to the wall; it hung right there.

"X Q. 118. You worked with your face to the wall?

"Ans. Yes, sir.

"X Q. 119. By your bench?

"Ans. No; the bench was in the middle of the floor.

"X Q. 120. You had to bend forward to look at the scale, the face of the scale, of course?

"Ans. Yes, sir.

"X Q. 121. That was on the wall?

"Ans. That was on the wall.

"X Q. 122. Now, what height above the floor did you have that scale?

"Ans. Well, I should think about five feet so that it was just even with your eyes, so that the letters would come about even with your eye.

"X Q. 123. Looked into the scale?

"Ans. Yes; that is right.

"X Q. 124. Did you have any way of raising or lowering the scale on the wall?

1359 "Ans. No, sir.

"X Q. 125. What did you do when persons of different heights used the scale?

"Ans. They would either have to stand up or look down; when they used the scale, they would try to get their eye on a line with it. We had it practically right on a line with your eye.

"X Q. 126. That is the way you intended to use the scale?

"Ans. Yes; right on a level.

"X Q. 127. How close did you have to get to read the scale?

"Ans. Well, sometimes in a dark place, sometimes in the afternoon, we would have to get a little closer. We could stand right up and look over easily. It was plain to see especially with a young man twenty-five or thirty.

"X Q. 128. What was the capacity of that scale?

"Ans. Fourteen pounds.

"X Q. 129. You weighed meat on it?
"Ans. Yes, sir .
"X Q. 130. Did you have a grocery shop there in addition to the meat?
"Ans. Yes, sir.
"X Q. 131. Did you weigh vegetables on it?
"Ans. Yes, sir.
"X Q. 132. How close could the customer stand to the scale?
"Ans. Well, the bench was not more than 20 inches, perhaps; they could stand right here and look right at it. It would not be more than 15 or 18 inches.
"X Q. 133. How far from the wall was the customer?
"Ans. Perhaps 20 inches, may be 18 or 20 inches, then the bracket was outside of that, practically in the middle of the counter line.
"X Q. 134. You say your father paid $10 for his scale?
"Ans. Yes.
"X Q. 135. How do you know that?
"Ans. Well, we were close in business; he told us.

"Mr. Zane: I move to strike out the statement that his father paid $10 for his scale.
"The Witness: I didn't pay it.

"X Q. 136. You did not see it paid?
"Ans. No.
"X Q. 137. You only know that from what he told you?
1360 "Ans. That is all.
"X Q. 138. Did you ever see that scale that your father had and that you afterwards had sealed?
"Ans. Yes, sir.
"X Q. 139. And the particular man that sealed it was named, what?
"Ans. John Potter.
"X Q. 140. That was the old man of eighty?
"Ans. Well, he was an old man then. He was pretty old when he died. He was quite old. He always had a man come with him and brought his weights in — wheelbarrow, the man wheeled the wheelbarrow and brought in the weights. When he tried the platform scales they had larger scales and the man brought the scales for him.
"X Q. 141. Did you ever see anybody else than Potter seal that scale?
"Ans. I don't think so.
"X Q. 142. The other scale, the one you bought?
"Ans. Yes, sir.
"X Q. 143. You say that was bought about '75?
"Ans. About '75, I should think somewhere—well, between that date and one and five.
"X Q. 144. How long did you use that scale?
"Ans. I moved that scale from that store to the other store.

"X Q. 145. When you say "the other store", what do you mean?
"Ans. My father's store, 78 River street.
"X Q. 146. You moved that scale to 78 River Street, when?
"Ans. The fall of '75, I think.
"X Q. 147. How long did you use that scale at 78 River street?
"Ans. Well, fifteen or eighteen years.
"X Q. 148. And what became of that scale?
"Ans. I have got it yet.
"X Q. 149. Where is it?
"Ans. At my house.
"X Q. 150. You have it now at your house?
"Ans. Yes, sir.
"X Q. 151. How long has it been since it was used?
"Ans. I should think nearly twenty years, hardly twenty years.
"X Q. 152. Now, that second scale: Did you ever see anybody seal it?
"Ans. Yes, sir.
1361 "X Q. 153. Who was that person?
"Ans. James M. Crawford.
"X Q. 154. When did you see that done, what year?
"Ans. I can't remember; the seal is on there now, but I can't tell exactly what date.
"X Q. 155. Do you know what the tolerance of the scale was?
"Ans. How is that?
"X Q. 156. What the tolerance was?
"Ans. Tolerance?
"X Q. 157. Yes; Do you know what that means?
"Ans. No.
"X Q. 158. You don't know what the sealer, what tolerance he permitted in the scale?
"Ans. No.
"X Q. 159. Did you ever have occasion to adjust your scale?
"Ans. No; I never did.
"X Q. 160. You never put it in balance in that time?
"Ans. No.
"X Q. 161. You never did?
"Ans. No.
"X Q. 162. What did your customers do to you?
"Ans. Nothing; they accepted the weights and found them accurate.

"Mr. Zane: I move to strike out his statement, "found them accurate".

"X Q. 163. Do you mean to say that neither of those scales you ever balanced?
"Ans. I never did, no sir.
"X Q. 164. Did you ever see anybody balance them?
"Ans. No.
"X Q. 165. Did you ever see the sealer balance them?
"Ans. No; he never did, but I think Mr. Phinney used to adjust them once in a while.

"X Q. 166. Mr. Phinney came around?
"Ans. I don't think he ever took them round.
"X Q. 167. I am asking about yourself.
"Ans. No.
"X Q. 168. You never saw Phinney even adjust your scales?
"Ans. No, sir.
"X Q. 169. Either of those two scales?
"Ans. No, sir; I know there was an adjuster.

1362 Redirect examination.

By Mr. Meads:

"R. D. Q. 170. Mr. Devlin, the scale which you bought, who paid for it?
"Ans. I paid for it.
"R. D. Q. 171. Yourself.
"Ans. Yes, sir.
"R. D. Q. 172. To whom?
"Ans. Mr. Phinney.
"R. D. Q. 173. Which Mr. Phinney?
"Ans. The old gentleman, William H. Phinney.
"R. D. Q. 174. You paid for it in cash?
"Ans. I think I did.
"R. D. Q. 175. How much?
"Ans. $10.
"R. D. Q. 176. Have you anything that fixes in your mind that it was in 1885 that you started again in business at 78 River Street?

"Mr. Zane: He said 1875.
"The Witness. No; 1885.

(The question is read.)

"Ans. Yes, I think I have.

"By Mr. Meads:

" R. D. Q. 177. What is it?
"Ans. Well, I had some circulars printed at that time.
"R. D. Q. 178. Have you ever preserved any of those circulars?
"Ans. Yes, I don't know but I have got one in my pocket now.
"R. D. Q. 179. Will you look and see?
"Ans. There are a few matters here that I thought—(Witness produces certain papers)—that looks like it.
"R. D. Q. 180. I show you the document which you have handed me, headed "New Market. The subscriber will open a market on Saturday, September 19, 1885, at 78 River street, Pawtucket, R. I., and will keep a full line of meat, vegetables, canned goods, and so forth, all to be sold at the very lowest cash price. John H. Devlin." There is a line and underneath the line "Sweetland, Printer, 88 Main street, Pawtucket, Rhode Island."

"Mr. Zane: We object to this reading as immaterial, irrelevant and incompetent, either as checking the contents of the document, or as something volunteered on the part of counsel.

"By Mr. Meads:

"R. D. Q. 181. Mr. Devlin, you have just produced that
1363 from your pocket: From where did you get it before today?

"Ans. Oh! I had it in my box. I keep some papers at home.

"R. D. Q. 182. Where did you first see that instrument?

"Ans. Why, I had them printed with Mr. Sweetland. I ordered them printed, myself, and saw him printing them.

"R. D. Q. 183. When was that?

"Ans. In that year, within a few days this was started and I think the first of that week.

"R. D. Q. 184. Were these printed before or after September 19, 1885?

"Ans. Printed before.

"R. D. Q. 185. Did you have more than one of these?

"Ans. Yes, sir.

"R. D. Q. 186. Approximately how many?

"Ans. One or two hundred.

"R. D. Q. 187. This is one of that edition of one or two hundred?

"Ans. Yes, sir.

"R. D. Q. 188. And it has been in your possession ever since that time?

"Objected to as leading.

"Ans. Yes, sir.

"R. D. Q. 189. Where has it been ever since?

"Ans. At my home.

"R. D. Q. 190. Where was it brought from to this hearing today, from what place?

"Ans. From my home.

"R. D. Q. 191. In Pawtucket?

"Ans. Yes, sir.

"Mr. Meads: I offer in evidence the instrument identified by the witness and ask the Commissioner to mark the same "Defendant's Providence Exhibit No. 7."

(The instrument referred to is marked "Defendant's Providence Exhibit No. 7.")

The same is objected to as immaterial, incompetent and irrelevant.

"R. D. Q. 192. Mr. Devlin, did you, at any time, ever receive any advertising matter, or other material from Mr. William Phinney concerning this kind of scale?

"Ans. Yes, sir.

"R. D. Q. 193. Where was it you received such advertising matter?

"Ans. At River street—at 78 River street.

1364 "R. D. Q. 194. About when?

"Ans. I should think—I couldn't fix the date of that—twenty-five years ago, such a matter.

"R. D. Q. 195. Have you kept any such advertising matter?

"Ans. Yes sir.

"R. D. Q. 196. Have you any such advertising matter now?

"Ans. Yes, sir.

"R. D. Q. 197. Have you any such advertising matter with you?

"Ans. Yes, sir.

"R. D. Q. 198. Will you submit any such advertising matter that you have?

"Ans. (Witness produces certain papers.)

"R. D. Q. 199. You have handed me 11 circular; From whom did you receive those pieces of paper?

"Ans. William H. Phinney.

"R. D. Q. 200. At the time you mentioned, about 25 or 30 years ago?

"Ans. Something like that.

"R. D. Q. 201. At Pawtucket?

"Ans. Pawtucket, yes.

"R. D. Q. 202. The circulars are all alike, those which you handed me?

"Mr. Zane: Objected to; they show for themselves.

"Ans. Yes.

By Mr. Meads:

"R. D. Q. 203. I will take one of the package which you have handed me and ask you to compare it with the document offered in evidence in this case as Defendant's Providence Exhibit No. 5, and state whether they are the same?

"Ans. They seem to be just the same, and they are checked on that cross just the same on the date. There must have been a misprint.

"R. D. Q. 204. When you received this circular, which I ask the Commissioner to mark as "Defendant's Providence Exhibit No. 8" was there any erasure or pencil mark on it?

"Ans. There seemed to be on the "63" there—there is a little cross.

"R. D. Q. 205. Was that on it when you received it from Mr. Phinney?

"Ans. Yes, sir.

"R. D. Q. 206. Is the instrument in the same condition now as it was when you received it from Mr. Phinney?

1365 "Ans. Practically the same; I don't see any change.

"Mr. Meads: I offer in evidence the instrument identified by the witness, being "Defendant's Providence Exhibit No. 8."

(The instrument referred to is marked "Defendant's Providence Exhibit No. 8.")

The same is objected to as immaterial, irrelevant and incompetent.

Recross-examination.

By Mr. Zane:

"R. X Q. 207. The circular which has been marked Providence Exhibit 7: Who told you to bring that here?

"Ans. No one.

"R. X Q. 208. Have either of these gentlemen who are here ever talked with you about it?

"Ans. I never saw them before that I know of.

"R. X Q. 209. Before you came here?

"Ans. No.

"R. X Q. 210. How did you happen to bring it?

"Ans. Well, I just thought—I know the date—I had most forgotten the date I started there. I knew I had these and I put one in my pocket.

"R. X Q. 211. Now the paper that has been marked, Providence Exhibit 8: How many years ago did you receive that?

"Ans. Between 25 and 30 I should think.

"R. X Q. 212. What year would that be?

"Ans. Mr. Phinney, I think, has been dead,—he died in 1902—that would be fifteen years.

"R. X Q. 213. What year did you receive it, as near as you can tell us?

"Ans. Well, I should think surely ten years before that.

"R. X Q. 214. Then you think you got it as early as 1882?

"Ans. I should think so.

"R. X Q. 215. Have you any recollection of that Providence Exhibit 8 coming into your possession?

"Ans. Yes.

"R. X Q. 216. Did the whole 11 come into your possession at the same time?

"Ans. Yes.

"R. X Q. 217. You have a distinct recollection of it, have you?

1366 "Ans. Yes.

"R. X Q. 218. Where were you at the time you received them?

"Ans. I was at 78 River street.

"R. X Q. 219. Who handed them to you?

"Ans. Mr. Phinney.

"R. X Q. 220. The father, William H. Phinney?

"Ans. Yes, sir.

"R. X Q. 221. You have a distinct recollection of that?

"Ans. Yes, sir.

"R. X Q. 222. Happening in 1882?

"Ans. Yes; I couldn't say exactly that it was '82.

"R. X Q. 223. Well, about that time?
"Ans. About that time, yes, sir.
"R. X Q. 224. How many did he hand to you?
"Ans. Quite a few; those were all folded up together. I know I laid them away. I don't know as I have looked at them since.
"R. X Q. 225. Did you do anything with the circulars except fold them up and put them away?
"Ans. I might give out a few. I was thinking of trying to sell some for him, that is all.
"R. X Q. 226. Where did you put them when you put them away?
"Ans. I put them into a letter—there was an old secretary I had in the shop. They were put in that drawer and they were there until I took them out yesterday morning.
"R. X Q. 227. And you now have a distinct recollection of Mr. Phinney giving you those circulars?
"Ans. Yes, sir.
"R. X Q. 228. When you were in your shop?
"Ans. Well, whether I was running it then or my father, it was in that store.
"R. X Q. 229. That is 78 River street?
"Ans. Yes, sir.
"R. X Q. 230. Now, you said nothing about these circulars in your affidavit?
"Ans. No.

"Mr. Zane: We move to strike out this testimony with regard to the manner in which the scales were weighed as stating a conclusion and as incompetent, irrelevant and immaterial.

1367 *Charles H. Tierney.*

CHARLES TIERNEY, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"Ans. Charles H. Tierney.
"Q. 2. What is your age?
"Ans. I am coming forty-five.
"Q. 3. Where do you live?
"Ans. 65 Park street, Pawtucket.
"Q. 4. What is your business?
"Ans. Undertaker.
"Q. 5. Who was your father?
"Ans. Patrick Tierney.
"Q. 6. Where did he live?
"Ans. 310 Middle street.
"Q. 7. In what place?
"Ans. Pawtucket.
"Q. 8. What was your father's business?

"Ans. Well, he was in the meat business for a number of years. He was a janitor of schools after he quit the meat business, and after he retired.

"Q. 9. Is your father living?

"Ans. He died last June.

"Q. 10. What was your father's age when he died?

"Ans. When he died—about eighty-four year old.

"Q. 11. When did your father start in the meat business?

"Ans. I don't know. I was pretty small; I don't just remember.

"Q. 12. What is your earliest recollection of your father in the meat business, when you first remember?

"Ans. My father started in the meat business and Senator Gorton's father, that is George Gorton—I believe his father's name was George Gorton—we always traded with the Gortons, and he learnt my father how to cut meat when he started the meat business on Middle street.

"Q. 13. Have you any notion how old you were then?

"Ans. I don't remember just how old I was.

"Q. 14. Under twelve years old, were you?

"Ans. Oh, yes, under twelve.

1368 "Q. 15. So your father was in the meat business before you were twelve years old?

"Ans. Yes.

"Q. 16. And your father was in the meat business more than thirty years ago?

"Ans. Oh, yes.

"Q. 17. How old were you when you began to help in the meat business?

"Ans. Well, we were—we had the meat market in the basement of the house at 310 Middle street, the same house is there today, just the same, but he started—he might have—he had a little ell when he first started, or a little building, small building, then he went into the basement, if I remember it right.

"Q. 18. Did you, yourself, ever help him at all in the meat business.

"Ans. Oh, yes.

"Q. 19. How long did you live with your father, up to what age?

"Ans. I lived with my father till—I was at home about 29 or 30 years.

"Q. 20. During that time—was he in the meat business when you left?

"Ans. No; he was janitor of schools when I left home.

"Q. 21. Can you fix now any time at which your father stopped the meat business and went in this other line of business?

"Ans. Well, no; I couldn't exactly tell you the year but John W. Abbott was manager of the Chicago Beef Company, in the Pawtucket branch, and he asked my father, one morning, saying he was getting pretty old——

"Objected to.

"The Witness (continuing): —so that he could get him a job because he was on the school committee, put him in janitor of a school.

"Objection repeated.

"The Witness (continuing): That conversation with Abbott, you can fix the time, you can find out from the school committee what year he was appointed; I don't remember. He was janitor for years.

"Q. 22. Was that as much as ten years ago?

"Ans. Oh, yes. I think he was janitor of the schools sixteen years.

"Q. 23. Sixteen years before he died?

1369 "Ans. Before he retired—then he retired.

"Q. 24. How long after he retired, did he die?

"Ans. Quite a few years.

"Q. 25. What do you mean by "quite a few"—ten?

"Ans. Eight or ten years, something like that, about that.

"Q. 26. So that would make him go out of the meat business upwards of 20 or 24 years ago?

"Ans. Yes, about that.

"Q. 27. When he was in the meat business did he use any scales or weighing device?

"Ans. Yes, sir; we had four different scales that I can remember.

"Q. 28. Do you see, in this room, any scale such as any of those you used?

"Ans. That one right there (indicating Defendant's Providence Exhibit No. 3).

"Q. 29. Where was your father when he got that scale—what place?

"Ans. At Middle street.

"Q. 30. Were you present when the scale was delivered?

"Ans. No.

"Q. 31. How long had you personal knowledge of the scale remaining at Middle street?

"Ans. Well, it remained there until it was taken away. I don't remember—about a year or two ago, I guess it was taken away.

"Q. 32. How long was it in use?

"Ans. All the time he was in the meat business, that I can remember of. I can remember the scales very well.

"Q. 33. Did you, yourself, ever use the scale?

"Ans. Well, yes; all the boys used it.

"Q. 34. Who were there besides your father and you? You say all the boys?

"Ans. My brother Jim and my brother John and my sister—we all used the scale.

"Q. 35. How old were you when you first have recollection of using such a scale?

"Ans. Oh, I might have been ten years old—eleven years old.

"Q. 36. Is that approximately your age?

"Ans. Yes; I was going to school at the time.

"Q. 37. When did you last see that particular scale?

"Ans. Well, we didn't use that scale. We were just run-

1370 ning on a meat cart at the latter part of it and we didn't use that scale at all. Of course, on the meat cart we could not

put up a scale like that. We had a regular hanging scale. We didn't do any market business at the last of it.

"Q. 38. Was the scale used there during all the time you did the market business at Middle street?

"Ans. Yes, sir.

"Q. 39. Now, as near as you can, how many years did you, yourself, know of the scale being actually in use at Middle street?

"Ans. Well, it was at use at Middle street and it was at use on Central street, Central Falls, for a number of years. My father moved from Middle Street to Central Falls, to Central street, and run a market there for a number of years; then he moved back on Middle street and built a large addition to the house and run a market there for a number of years. I can't remember just the years.

"Q. 40. How long was your father in Central Falls, Mr. Tierney?

"Ans. I couldn't tell you. It was quite a few years. He was in the building where Olney Wilmarth's hardware store is, on Central street.

"Q. 41. Was he is Central Falls more than one year?

"Ans. Oh, yes, a number of years.

'Q. 42. Was he in Central Falls more than two years?

"Ans. Oh, yes.

"Q. 43. More than five years?

"Ans. I think so, yes, longer than that.

"Q. 44. During the time that he was in Central Falls did he use this particular kind of scale?

"Ans. Yes, sir.

"Q. After he came back from Central Falls did he use this particular——

Objected to as leading.

"Q. 45. (continued). —scale on Middle street?

"Ans. Yes, sir.

"Q. 46. Have you any recollection how long he was on Middle street after he came back from Central Falls before he went into the janitor business, or before he went into any other business?

"Ans. Well, he ran a meat cart. He quit business when he went into the janitor business, but us boys ran the meat cart.

1371 "Q. 47. After your father went into what you call the janitor business, who conducted the Middle street store?

"Ans. We didn't conduct any regular market; it was just a cart.

"Q. 48. Then the boys ran into the meat cart?

"Ans. Yes, sir.

"Q. 49. Then they ceased using this scale?

"Ans. Yes, sir.

"Q. 50. Now, as near as you can, Mr. Tierney, about how long was it that you boys started running that meat cart?

"Ans. Oh, I should think in the neighborhood of twenty years ago; it might be a little more than twenty years ago—that is rough.

"Q. 51. Was it at least twenty years ago?

"Ans. Yes; probably a little more.

"Q. 52. Now, other than this, besides this kind of the Phinney scale, did you ever have any kind, you or your father?

"Ans. Yes; we had platform scales. Then we had those large hanging scales with big weights, to weigh beef.

"Q. 53. Did you have any other kind of Phinney scale?

"Ans. No, not that I know of. I remember that one well.

"Q. 54. Have you any recollection as to whether the scale which was used by your father was ever inspected by any one?

"Ans. I couldn't say that.

"Q. 55. You don't know that?

"Ans. I don't remember that.

"Q. 56. Have you any recollection as to whether the scale that was used by your father had on it any labels, or other indications of official action?

"Ans. I would not remember that scale but I know that that platform scale in the same building had a seal on it. I never remember the seal on the scale but I know that that platform scale was sealed.

"Q. 57. Do you know where the scale now is which was similar to this Providence Exhibit 3 which was used by you and your father?

"Ans. I think Mr. Phinney has got it.

"Q. 58. Mr. Phinney?

"Ans. Yes, sir.

"Q. 59. Did the scale that your father and you used, similar to Providence Exhibit 3, have two openings like this scale?

1372 "A. Just like that, similar to that; just about the same.

"Q. 60. Was there a hook at the bottom?

"Ans. Yes, sir.

"Q. 61. On the hook what was suspneded, if anything?

"Ans. A little tin pan, a kind of cheap arrangement—a tin pan, very cheap. It was not a very large plate.

"Q. 62. Have you, yourself any personal knowledge as to how much your father paid for that scale?

"Ans. No; I don't know.

"Q. 63. Did the scale which your father had have anything on its face through which the readings were made?

"Ans. Just the glass, just the same as that.

"Q. 64. It had a glass?

"Ans. Yes, sir.

"Q. 65. And the figures on the metal case, metal strip below the glass?

"Ans. I wouldn't say the figures, but it was just the same as that, I would suppose, in the center.

"Q. 66. There were figures there?

"Ans. Yes; there was something. We never paid special attention to that but I know we had one of the scales, that is all.

Cross-examination.

By Mr. Zane:

"X Q. 67. What do you mean? You never paid any attention to the figures?

"Ans. In what way? He said on the top there, or something; I never paid any attention to that.

"X Q. 68. You remember the box in your father's shop: How many other scales were in that shop?

"Ans. Three more.

"X Q. 69. What were they?

"Ans. A large one we used to weigh beef on, then we had a platform scale and a small scale.

"X Q. 70. The platform scale was for heavy weights?

"Ans. Yes; potatoes, cabbage, or anything else.

"X Q. 71. Was a platform scale which stood on a counter?

"Ans. On the floor.

"X Q. 72. What kind of a scale was it, a beam scale?

"Ans. Yes, to put weights to 50 pounds, 100, 200.

X Q. 73. The beef scale you speak of, what kind of scale was that?

1373 "Ans. That was the same as those on any beef house, where you shift your weights along.

"X Q. 74. Steel yard?

"Ans. Yes.

"X Q. 75. And that weighed, in what quantities?

"Ans. It would weigh a side of beef, a fore-quarter, a hind-quarter, anything like that you wanted to weigh.

"X Q. 76. You had a small scale?

"Ans. Yes, sir.

"X Q. 77. What kind of a scale was that?

"Ans. That was a kind of regular, ordinary scale, just the same as a common scale today.

"X Q. 78. It was a hanging scale, was it?

"Ans. Yes.

"X Q. 79. With a pan below?

"Ans. Yes.

"X Q. 80. And a dial?

"Ans. Yes.

"X Q. 81. And the revolving hand showed the weight?

"Ans. Yes.

"X Q. 82. The ordinary butcher's scale?

"Ans. The meat cart scale, we called them.

"X Q. 83. You weighed on that scale, did you, there?

"Ans. Sure; if we were busy we would weigh on any scale.

"X Q. 84. Now, between what years were you using that scale?

"Ans. Using that scale?

"X Q. 85. Yes; this box scale.

"Ans. Well, I should say about 35 years ago, or more.

"X Q. 86. You, yourself, were using it—what were those years?

"Ans. I didn't use that much myself.

"X Q. 87. You didn't use the scale?

"Ans. Not much, myself, no.

"X Q. 88. Why?

"Ans. Because I wasn't in the meat business.

"X Q. 89. You were helping your father, were you not?

"Ans. Yes; when we were boys we went to school. If anybody came in we would run down.

"X Q. 90. But you didn't use that scale; you used the revolving?

"Ans. Oh, no; that was always up over the bench, right there against the wall. That is the scale that they used, but when
1374 they used to come in with the meat cart they would bring in the other scale and hang it up.

"X Q. 91. Now, you said you didn't use that scale very much?

"Ans. No; I wasn't much in the market.

"X Q. 92. When you were in the market there what scale did you use?

"Ans. Either one of them.

"X Q. 93. Sometimes one, sometimes the other?

"Ans. Yes, whichever one you were nearest to.

"X Q. 94. You were a boy then twelve years old?

"Ans. About that.

"X Q. 95. How tall were you?

"Ans. How tall was I then?

"X Q. 96. Yes.

"Ans. Always pretty tall for a boy, kind of stringy kind of boy.

"X Q. 97. Could you get your eyes even with the slot in the scale?

"Ans. We would have to look up a little at it.

"X Q. 98. You looked up at it?

"Ans. Yes.

"X Q. 99. Did you read the values on the scale, your pounds and ounces?

"Ans. My sister learned us at that time just how to read it.

"X Q. 100. Which did you read—the values, or the pounds and ounces?

"Ans. You got the pounds and so much a pound, which told *told* you the amount.

"X Q. 101. Which figure did you read on the scale?

"Ans. It depended on what we were weighing.

"X Q. 102. Did you read the weight figures or the value figures?

"Ans. The value figures.

"X Q. 103. Were there more than one set of value figures coming into view?

"Ans. Well, of course, yes.

"X Q. 104. You see two sets, one above the other?

"Ans. No; not when you set it; when it went along just as you see it there, it was set at one figure.

"X Q. 105. Could you not see two sets of figures at the same time, two lines of figures, could you not?

"Ans. I couldn't say that we could, no.

"X Q. 106. You don't remember that?

1375 "Ans. I don't remember anything like that.

"X Q. 107. You don't remember which line of figures you read, upper or lower?

"Ans. I couldn't say now; it is so long ago, I couldn't say just.

"X Q. 108. You didn't use the scale very much?

"Ans. No, I say I didn't.

"XX Q. 109. Did you ever test it?

"Ans. No, sir.
"X Q. 110. Did you ever see it balanced?
"Ans. No, sir.
"X Q. 111. When your father's meat shop was closed what became of the scale?
"Ans. He had it in the house.
"X Q. 112. And it stayed in the house how long?
"Ans. Oh, for years.
"X Q. 113. Then what became of it?
"Ans. He—I think he let Mr. Phinney have it.
"X Q. 114. Which Mr. Phinney?
"Ans. I think Mr. Phinney here.
" XQ. 115. The one who is here?
"Ans. I think so; yes, sir.
"X Q. 116. How long ago was that?
"Ans. Oh, I don't know. My father told me at the time; it wasn't very long ago.
"X Q. 117. About how many years?
"Ans. Well, I wouldn't want to say. I don't think over a couple of years ago, something like that.
"X Q. 118. You don't know what became of it, what Mr. Phinney did with it?
"Ans. No, I don't.

"E. Willard Horton.

"E. WILLARD HORTON, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"Ans. E. Willard Horton.
"Q. 2. How old are you?
"Ans. Fifty-seven.
1376 "Q. 3. Where do you live?
"Ans. Pawtucket.
"Q. 4. Where, in Pawtucket?
"Ans. 12 Manchester street.
"Q. 5. Do you know Thomas Z. Phinney?
"Ans. Yes, sir.
"Q. 6. How long have you known Thomas Z. Phinney?
"Ans. Well, I couldn't tell you exactly, ever since he came to Pawtucket to live, probably 45 years ago, may be.
"Q. 7. Where were you born, Mr. Horton?
"Ans. Pawtucket.
"Q. 8. Lived there all your life?
"Ans. Yes, sir.
"Q. 9. Do you remember Mr. Phinney's father?

"Ans. Yes, sir.

"Q. 10. Did you ever go to the shop where his father worked?

"Ans. Yes, sir.

"Q. 11. Where was that shop?

"Ans. It was on East avenue, as they call it now; it was Jenks street at that time.

"Q. 12. Did you ever see his father working at any of these scales?

"Mr. Zane: I object to his leading.

"Ans. Yes.

"By Mr. Meads:

"Q. 13. How often?

"Ans. If I can tell it in my own way—I lived in the next house to Mr. Phinney, and this Mr. Phinney, Thomas Phinney and myself were chums. He was in my house; I was in his; we went in the shop and I might be there every day for weeks at a time, sometimes in the house, sometimes in the shop, if there was anything in the shop we used to go down there.

"Q. 14. Did you ever see him at work on anything in the shop?

"Ans. Yes, sir.

"Q. 15. What did you ever see him work on?

"Ans. I saw him put those scales together and make the parts of them, the wood part of them, and drums.

"Q. 16. Did you ever see more than one kind of these scales?

"Ans. Yes, sir.

"Q. 17. What was the difference?

"Ans. Well, as I remember, most of them that I saw were
1377 either with the wooden frame there, or the cast iron casing there.

"Mr. Zane: I move to strike out all this witness's evidence because every question asked him has been leading.

"By Mr. Meads:

"Q. 18. What did you see in the shop of Mr. Phinney?

"Ans. Well, I saw him working on those scales at times; sometimes he was working at his trade as a carpenter.

"Q. 19. What kind of scales?

"Ans. Self-reckoning scale.

"Q. 20. What kind of cases, if you know, were on those scales?

"Ans. Some were cast iron, some were wood.

"Q. 21. How old were you when you first saw him working on these scales?

"Ans. Probably thirteen or fourteen years old. I should not want to say exactly—as soon as two boys could get acquainted.

"Q. 22. Who was Daniel Horton?

"Ans. He was a man that carried on the meat business at one time. He was afterwards a police officer in Pawtucket, and later a deputy-sheriff employed by the State of Rhode Island.

"Q. 23. How long did you know Daniel Horton?

"Ans. Why, I never was personally acquainted with the man, that is, I knew him as anybody would know an officer in that town.

"Q. 24. What was his business when he was in business?

"Ans. I think he ran a meat market; I wouldn't say whether he sold groceries or not.

"Q. 25. Do you know where the meat market was?

"Ans. It was on Pine street, I think, about the head of South Union, as near as I remember.

"Q. 26. How old were you when you first have any recollection of Mr. Horton's place of business?

"Ans. Well, I was going to school, probably fourteen or fifteen years old.

"Q. 27. Did you ever go there to buy anything?

"Ans. I don't think I did.

"Q. 28. Were you ever in the place?

"Ans. I have been in the store, yes, sir.

"Q. 29. More than once?

"Ans. I think so; I was acquainted with the clerk that worked there.

1378 "Q. 30. Did you ever observe any scales in his store?

"Ans. I should not want to state positively that I did.

"Q. 31. Do you know whether he had any scales in his store?

"Ans. I should suppose he had.

"Mr. Zane: I move to strike out what the witness supposes.

"By Mr. Meads:

"Q. 32. Is Mr. Daniel Horton now alive?

"Ans. He is not, to the best of my knowledge and belief.

"Q. 33. How long ago did Mr. Horton die?

"Ans. Well, I couldn't tell you by anything; I should think it was as much as ten years ago; it might not be; it might be more.

"Q. 34. Were you ever in Devlin's market?

"Ans. Yes, sir.

"Q. 35. How often?

"Ans. Well, my father used to trade there. Occasionally I was sent there on errands. I would average once a week, probably.

"Q. 36. Did you ever observe in Devlin's store, whether any of these scales were in Devlin's store?

"Ans. Yes, sir.

"Q. 37. When I say "these scales," I mean scales like Providence Exhibit No. 3?

"Ans. That wooden casing?

"Q. 38. Yes.

"Ans. Yes, sir.

"Q. 39. Did you ever see any of those scales in Devlin's store?

"Ans. Yes, sir.

"Q. 40. How many?

"Ans. I know he had one in there.

"Q. 41. Do you have any recollection of seeing any in that store?

"Ans. Yes, sir.

"Q. 42. Have you any recollection of its being in that store any time, continuous time?

"Ans. I guess it was there ever since we used to go there.

"Mr. Zane: I move to strike out what the witnesses guesses.

"By Mr. Meads:

"Q. 43. How long did you used to go there?

"Ans. As long as I was acquainted with the market I should say the scale was there.

1379 "Q. 44. How long were you acquainted with the market, Mr. Horton?

"Ans. Several years; I think we used to go there when the old gentleman was there and when Mr. Devlin was there.

"Q. 45. As near as you can say how many years did you go there to that market?

"Ans. Well, I should think it would cover five or six years any way.

"Q. 46. Back how far? How old were you when you first remember that market?

"Ans. I couldn't tell how old I was but I can remember what there was there before the market was opened.

"Q. 47. You remember the market before Devlin opened it?

"Ans. I remember the store. I think I remember the store before they opened the market there.

"Q. 48. After they opened the market where was it? What place are you talking about?

Ans. It was on Pleasant street; I couldn't tell you the number. It was a chipstone building on Pleasent street. It belonged to the Thornton estate, if I remember rightly. There was a coal office there before the market was started. I can't tell dates.

"Q. 49. Were you a school boy when that was opened?

"Ans. Yes, sir.

"Q. 50. What time did you quit school?

"Ans. I think about sixteen or seventeen years old.

"Q. 51. Did you see any of these scales like Providence Exhibit 3 at Devlin's market before you stopped going to school?

"Ans. Well, if I saw them at all I saw them before I was going to school.

"Mr. Zane: He says if he saw them at all. I move to strike out his statement.

"By Mr. Meads:

"Q. 52. Before, Mr. Horton, you saw these scales at all?

"Ans. I say yes. If I made a misstatement I am willing to answer the question over again.

"Q. 53. Did you see such a scale as Providence Exhibit 3, at Devlin's market?

"Ans. I sure did.

Objected to as leading, and counsel for plaintiff moves to strike out the answer.

1380 "Q. 54. What kind of scale did you see, if you saw, at Devlin's market?

"Ans. I can't remember any scale except that scale that wa- in Devlin's market.

"Q. 55. By 'that' scale, what scale do you mean?

"Ans. The wooden case scale there (indicating Providence Exhibit 3).

"Q. 56. Now, when was it that you saw that scale at Devlin's market?

"Ans. Well, I was going to school.

Cross-examination.

By Mr. Zane:

"X Q. 57. You never saw but one at Devlin's market that you recall?

"Ans. I would not say that I saw more than one but I can remember there was—the second was there—I can remember that he used it—that scale.

"X Q. 58. The wooden scale?

"Ans. Yes, sir.

"X Q. 59. You never used that scale yourself?

Ans. I never used it, no, sir. I saw them. I didn't work in the store.

"X Q. 60. You also made an affidavit, on the second of January, 1913, didn't you?

"Ans. I couldn't tell you.

"X Q. 61. Before Fexlix F. Thrum, a Notary Public?

"Ans. I made some statement before him, if I remember right.

"X Q. 62. Before making that statement you were sworn, too, by him?

"Ans. I guess I was. He came to my house, one night.

"Mr. Zane: Now, Mr. Meads, we call upon you to produce the affidavit of Mr. E. Willard Horton, the original affidavit.

"Mr. Meads: I haven't the original affidavit but I have an objection to your offering any evidence, or referring to what purports to be a copy of such affidavit, in your hand, or to one which is in my hand, which I submit to you for that purpose, if you so desire.

"Mr. Zane: It is the original that we want that is now being suppressed.

"Mr. Meads: There is no evidence that it has been suppressed other than your statement which I don't consider evidence of that fact.

1381 *Joseph McNally.*

JOSEPH MCNALLY, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"Ans. Joseph McNally.
"Q. 2. Where do you live?
"Ans. 48 New Cole street, Pawtucket.
"Q. 3. What is your age?
"Ans. Forty-seven, about?
"Q. 4. What is your business?
"Ans. Grain, produce dealer.
"Q. 5. How long have you been a grain and produce dealer?
"Ans. About nineteen years.
"Q. 6. Do you know Mr. Thomas Z. Phinney?
"Ans. No, sir.
"Q. 7. Did you know William H. Phinney?
"Ans. I knew the old gentleman. I didn't know what his first name was.
"Q. 8. Where was he when you first became acquainted with him?
"Ans. Well, his residence was at the corner of Pine—not Pine—yes, Pine and Main street, and running to the corner of West avenue. I think that is the boundary of his property.
"Q. 9. What business did you have with the man you thought was the old gentleman, if any?
"Ans. Well, there was one spell I used to work on the cars, a conductor. He used to ride back and forwards. I think his son, or daughter, one or the other, lived on Central avenue, I think.
"Q. 10. Afterwards did you have business with him?
"Ans. No, sir.
"Q. 11. Did you ever know any scale called the Phinney scale?
"Ans. Yes, sir.
"Q. 12. Where did you see such a scale first?
"Ans. At the junction of Pawtucket avenue and Waldo
1382 street.
"Q. 13. Where?
"Ans. Pawtucket.
"Q. 14. What was at that place that you have just mentioned?
"Ans. A butcher market.
"Q. 15. Who conducted that butcher market?
"Ans. John H. Arnold.
"Q. 16. How long did he conduct a butcher market there?
"Ans. About two years.
"Q. 17. What connection, if any, did you have with that butcher market?

"Ans. Clerk in the grocery department.
"Q. 18. How long were you in the employ of Mr. Cole?
"Ans. About seventeen months.
"Q. 19. As near as you can, state when you went into the employ of Mr. Arnold?
"Ans. About twenty-nine years ago.
"Q. 20. Twenty-nine years ago?
"Ans. Yes.
"Q. 21. And were there seventeen months?
"Ans. Seventeen months.
"Q. 22. During that time did Mr. Arnold have any scales in his establishment?
"Ans. Yes, sir; he had two.
"Q. 23. What kind of scales were they?
"Ans. A scale like that wooden one, and a bar platform scale.
"Q. 24. By the wooden one, do you mean Providence Exhibit 3?
"Ans. Yes, sir.
"Q. 25. Where did that scale stand in the place of business of Mr. Arnold?
"Ans. It was set up on two brackets in front of the shelves, over the counter.
"Q. 26. Who used that scale?
"Ans. The butcher, James Smith.
"Q. 27. Do you know where James Smith is?
"Ans. Yes, sir.
"Q. 28. Where is he?
"Ans. Valley Falls—Mount Calvery, Cemetery.
"Q. 29. That is, his mortal remains are there?
"Ans. Yes, sir.
"Q. 30. James may be elsewhere: Do you know when Mr. James Smith died?
1383 "Ans. No; I don't.
"Q. 31. Have you any information as to how long he has been dead, or beyond what time he has been dead?
"Ans. About fifteen years, I think.
"Q. 32. How often did you, if you saw James Smith use the scale, see him use the scale?
"Ans. Well, I couldn't exactly tell you the number of times but he used it a great many times during the day for weighing meats and small vegetables on.
"Q. 33. Did that practice continue during all the time you were at Mr. Arnold's, employed?
"Ans. Yes, sir; and until he sold out.
"Q. 34. Do you know when he sold out?
"Ans. No. I don't; no.
"Q. 35. Had he sold out before you left his employ?
"Ans. Afterwards.
"Q. 36. After you left the employ of Mr. Arnold did you ever go into that store?
"Ans. Yes, sir.
"Q. 37. How often?

"Ans. Well, I didn't go until I bought the market out myself.
"Q. 38. When you bought the market out, what did Mr. Arnold do?
"Ans. He had retired from the grocery business.
"Q. 39. What became of the grocery business?
"Ans. William H. Andrews took that end of it.
"Q. 40. When you bought the market out what became of this scale that you have described?
"Ans. It was in the market; the scale was in the market when I bought it.
"Q. 41. After you bought the market how long did you operate the market?
"Ans. About eight or nine months.
"Q. 42. During the time that you operated the market what scale was used in the market?
"Ans. That wooden one.
"Q. 43. The Phinney scale?
"Ans. Yes, sir.
"Q. 44. Did you, yourself, ever use it?
"Ans. Yes, sir.
"Q. 45. Do you know whether that was in daily use?
"Ans. Yes, sir.
"Q. 46. Was it in daily use?
1384 "Ans. Yes, sir.
"Q. 47. Do you know whether, during the time that Mr. Arnold or you used that scale, it was ever inspected by any one?
"Ans. Yes, sir.
"Q. 48. Was it inspected?
"Ans. Yes, sir.
"Q. 49. By whom?
"Ans. James Crawford, Sealer of Weights & Measures, Pawtucket.
"Q. 50. Where is that scale now?
"Ans. Well, when I brought it home I left it down — the cellar and the cabinet got broke on it. A party came one night and wanted to know if I had it. I told them no; I had the drum on the inside, so I let them have the drum.
"Q. 51. Do you know who that party was?
"Ans. Yes.
"Q. 52. Who was it?
"Ans. Daniel Horton.
"Q. 53. Is Daniel Horton now alive?
"Ans. No, sir.
"Q. 54. Do you know, Mr. McNally, about how long he has been dead?
"Ans. No; I don't. It is hard to keep track of them unless you keep a memorandum. That I don't do, there is no money in it.
"Q. 55. Now, Mr. McNally, as near as you can, state when it was that you took over that meat business?
"Ans. About 27 years ago last Christmas, just before Christmas.
"Q. 56. Twenty-seven years ago last Christmas?
"Ans. Between Thanksgiving and Christmas.

"Q. 57. That would be, then, just before Christmas in the year 1889?
"Ans. I won't say the year. I don't keep memoranda.
"Q. 58. How do you fix the date as being 27 years just before last Christmas?
"Ans. Two years before I was married.
"Q. 59. How long have you been married?
"Ans. Twenty-five years.
"Q. 60. That you know positively?
"A. Yes, sir.

1385 Cross-examination.

By Mr. Zane:

"X Q. 61. Did you ever make an affidavit about these matters before?
"Ans. No, sir; not as I know of.
"X Q. 62. Are you the clerk in the grocery department of Mr. Arnold?
"Ans. Yes, sir.
"X Q. 63. You began working for him how many years ago?
"Ans. I should think about 29 years.
"X Q. 64. That is, you began working in 1888?
"Ans. I won't say the year.
"X Q. 65. And how long did you work for him?
"Ans. Seventeen months.
"X Q. 66. Seventeen months?
"Ans. Yes, sir.
"X Q. 67. Then you took over the business?
"Ans. No, sir.
"X Q. 68. You quit working for him at that time?
"Ans. Yes, sir.
"X Q. 69. Then what did you do?
"Ans. Me?
"X Q. 70. Yes.
"Ans. Well, kind of rested a while.
"X Q. 71. Well, how long did that rest take?
"Ans. I don't keep a memorandum.
"X Q. 72. Have you any idea?
"Ans. No.
"X Q. 73. You certainly have some idea how long you were not doing anything at all, haven't you?
"Ans. No.
"X Q. 74. How old were you then?
"Ans. I can't say just exactly how old I was. I don't remember years and I didn't expect this thing, if I did I would have studied it, copied it all down and had it nice and handy for you.
"X Q. 75. You have no idea how many years you rested?
"Ans. No.
"X Q. 76. Then what did you do?

"Ans. Then I bought this market out when I got ready to go to work.

"X Q. 77. You have already fixed the date you bought the market, haven't you?

1386 "Ans. Oh, no; I said about the time.

"X Q. 78. You said it was Christmas.

"Ans. Between Thanksgiving and Christmas.

"X Q. 79. Twenty-seven years ago?

"Ans. Twenty-seven years ago.

"X Q. 80. And you kept the business for how long?

"Ans. Eight or nine months.

"X Q. 81. To whom did you sell?

"Ans. I moved out. I moved up home the stock and fixtures.

"X Q. 82. You didn't sell the business out at all?

"Ans. No, sir.

"X Q. 83. Just quit?

"Ans. Just quit, plain quit.

"X Q. 84. Well, now, during these seventeen months that you were clerk there, you were clerk in the grocery department?

"Ans. Grocery and meat.

"X Q. 85. In both departments?

"Ans. I always done work in the grocery and used to go to the butcher department when I had nothing to do, talk to the butcher.

"X Q. 86. Did you sell the meat?

"Ans. No, sir.

"X Q. 87. Nor did you cut it?

"Ans. No, sir.

"X Q. 88. And the occasions when you saw the wooden box scale was when you were in there talking to the butcher?

"Ans. Yes, sir.

"X Q. 89. Were the grocery department and the meat department in separate rooms?

"Ans. Yes, sir.

"X Q. 90. What other kind of scale was in the meat room?

"Ans. Well, it was a platform, a bar that run out from it.

"X Q. 91. A steel yard scale?

"Ans. I don't know what you call it. There was a bar on it.

"X Q. 92. There was a bar graduated in weights, and you moved the poise along?

"Ans. Moved the slide along to the figures.

"X Q. 93. To make your weight?

"Ans. Yes, sir.

1387 "X Q. 94. Now, the butcher used sometimes one scale and sometimes the other?

"Ans. Mostly that for meats.

"X Q. 95. You saw him using the other, too?

"Ans. Yes, sir; for vegetables, heavy stuff.

"X Q. 96. Did you ever see that scale that was in the Arnold market balanced, see anybody balance it?

"Ans. Yes, sir.

"X Q. 97. Who was it?

"Ans. George M. Crawford, Sealer of Weights & Measures.
"X Q. 98. Did you see him open the scale?
"Ans. No; I see him test the weights on the pan.
"X Q. 99. I meant, by balancing the scale, adjusting the scale so that it would balance on zero, or not?
"Ans. When they balance the scales they test them with weights from ounces up, to correct with the figures on the scale.
"X Q. 100. That is testing the scale?
"Ans. That is balancing too.
"X Q. 101. Did you see the scale balanced on zero?
"Ans. Yes, sir.
"X Q. 102. Did you see anybody adjust it to make it balance on zero?
"Ans. No, sir.
"X Q. 103. You didn't see the scale opened?
"Ans. No, sir.
"X Q. 104. All the time you were there?
"Ans. No, sir.
"X Q. 105. Did you ever use the scale yourself?
"Ans. Yes, sir.
"X Q. 106. What did you weigh on it?
"Ans. Meat.
"X Q. 107. I thought you didn't cut or sell meat?
"Ans. I bought the market.
"X Q. 108. Now, when was it, how long a time—during that seven or eight months that you owned it?
"Ans. Yes, sir.
"X Q. 109. You used it yourself?
"Ans. Yes, sir; I done my own cutting then.
"X Q. 110. Who told you to use the scale?
"Ans. The butcher.
"X Q. 111. This same Smith?
"Ans. Yes.
1388 "X Q. 112. And when you put a weight on the scale in the pan, did more than one row of figures come into view?
"Ans. The price and weight, I suppose, correspond.
"X Q. 113. The weights were in the row to show with the price?
"Ans. Yes.
"X Q. 114. Were there two rows of prices in view?
"Ans. I won't say.
"X Q. 115. When you run the market how many men did you have working for you?
"Ans. Myself.
"X Q. 116. All alone in the business?
"Ans. Yes, sir.
"X Q. 117. You ran just a meat business without any grocery department?
"Ans. Yes, sir.
"X Q. 118. Now, if I understand you correctly, while you were working as clerk you never used that scale?
"Ans. No, sir; I wasn't supposed to cut meat.

"X Q. 119. It was only after you acquired the business that you used the scale?
"Ans. Yes, sir.
"X Q. 120. Now, you say you saw the scale sealed by the sealer?
"Ans. When I worked for Mr. Arnold.
"X Q. 121. And that sealer's name was Crawford?
"Ans. Yes, sir.
"X Q. 122. You saw the scales sealed actually, did you?
"Ans. Yes, sir; he sealed the grocery scales and the market scale.
"X Q. 123. At the same time?
"Ans. Yes, sir.
"X Q. 124. Do you know what degree of tolerance he allowed on the scale?
"Ans. No, sir.
"X Q. 125. You never sold the scale?
"Ans. No, sir; I sold the inside of it.
"X Q. 126. You sold the drum?
"Ans. Yes.
"X Q. 127. And how long did you have it before Daniel Horton came after it?
"Ans. I had it laying in the cellar quite a while.
"X Q. 128. Have you any idea how long?
"Ans. No.
1389 "X Q. 129. Was it ten years?
"Ans. I won't say. I don't keep books on those things.
"X Q. 130. You said it was about two years ago that Horton came after it?
"Ans. No, he didn't; I didn't say no length of time.
"X Q. 131. How long ago was it?
"Ans. I don't know how long he is dead; I couldn't say when he came for it when I don't know how long he is dead.
"X Q. 132. When he came after it you simply gave him the inside of it?
"Ans. What was left.
"X Q. 133. The drum?
"Ans. Yes.
"X Q. 134. Did you ever make any attempt to sell that scale after you took it out of your place of business?
"Ans. No, sir.
"X Q. 135. Did you ever offer it for sale to anybody?
"Ans. No, sir.
"X Q. 136. How much did you pay Arnold for it?
"Ans. I didn't buy it of Arnold.
"X Q. 137. Well, how did you get it?
"Ans. I bought it of another party.
"— Q. 138. From whom did you buy it?
"Ans. Casey.
"X Q. 139. He did succeed Arnold, did he?
"Ans. No, sir.

"X Q. 140. Who was it succeeded Arnold?
"Ans. Gerry.
"X Q. 141. Did Casey succeed him?
"A. Yes, sir.
"X Q. 142. Whom did you buy it from?
"Ans. Casey.
"X Q. 143. What did you pay him for it?
"Ans. I bought the stock and all altogether.
"X Q. 144. You took it all?
"Ans. I took the lump just as it was.

1390 *Daniel C. Fallon.*

DANIEL C. FALLON, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"Ans. Daniel C. Fallon.
"Q. 2. Where do you live, Mr. Fallon?
"Ans. Pawtucket.
"Q. 3. Where, in Pawtucket?
"Ans. 34 Potter street.
"Q. 4. What is your age, Mr. Fallon?
"Ans. Sixty-one.
"Q. 5. What is your business?
"Ans. Coal business.
"Q. 6. How long have you been in the coal business.
"Ans. Since 1889.
"Q. 7. Before that what business were you in?
"Ans. Meat.
"Q. 9. Where were you in the meat business?
"Ans. Pleasant street.
"Q. 10. In what place, Pawtucket?
"Ans. Pawtucket.
"Q. 11. How long were you in the meat business?
"Ans. Four or five years, I don't know exactly.
"Q. 12. Were you in the retail business?
"Ans. Yes, sir.
"Q. 13. For yourself? Or with anybody?
"Ans. McDuff & Falkon.
"Q. 14. Of which firm you were one of the partners?
"Ans. Yes, sir.
"Q. 15. What weighing devices did you have in your establishment?
"Ans. We had a Phinney scale and a spring balance scale, and a platform scale.

"Q. 16. Do you see in the room any scale similar to what you call the Phinney scale?

"Ans. Yes; that one there.

"Q. 17. You mean, Providence Exhibit 3, the scale with the wooden case?

"Ans. Yes, that wooden case; the Phinney scale.

1391 "Q. 18. Was the scale which you used a wooden cabinet scale?

"Ans. Yes, sir.

"Q. 19. Did it have two openings like Exhibit 3?

"Ans. I believe so.

"Mr. Zane: I move to strike out this testimony as all coming under leading questions.

"By Mr. Meads:

"Q. Describe, as near as you can now, Mr. Fallon, the superficial aspect of the scale which you call the Phinney scale, which you used?

"Ans. That scale right there, as I remember, with a pan hanging on a hook underneath.

"Q. 21. Where was the scale in your market?

"Ans. Over the corned beef tray. We used it for weighing corned beef.

"Q. 22. What held the scales to the wall, if anything?

"Ans. Brackets; I found it there. Brackets; I never put it up there. I don't know whether it was screwed to the wall or not, but there was brackets under it.

"Q. 23. How many brackets?

"Ans. Two.

"Q. 24. One on either side?

"Ans. Yes.

"Q. 25. Suspended below this was the pan you talked about?

"Ans. Yes; hanging on a hook.

"Q. 26. On a hook?

"Ans. Yes.

"Q. 27. Can you now tell when that firm of McDuff & Fallon started to do business?

"Ans. I can't give you the year; we sold out in June, 1888, and we was in business four or five years.

"Q. 28. So that you must have started in 1883 or 1884?

"Ans. Well, or 1885, I don't exactly, somewhere in there. I don't know the year we started.

"Q. 29. Do you know the year you sold out?

"Ans. Yes.

"Q. 30. What fixes the year 1888 in your mind as the year in which you sold out?

"Ans. Because I married; next year we went into the coal business and have been there since—went in the coal business in 1889. I have looked that part up so as to be able to answer that much, but beyond that I can't go.

1392 "Q. 31. From whom did you acquire the plant and fixtures where you conducted this meat business?

"Ans. Frank Mitchell, I believe his name was.

"Q. 32. Did you, yourself, ever use either of those scales that were in that place of business?

"Ans. Every day.

"Q. 33. Did you use the scale which you have called the Phinney scale?

"Ans. Every day.

"Q. 34. During the time that you used that scale was it ever inspected by any one?

"Ans. The Sealer of Weights & Measures used to come round about once a year and put his weights on, and after put a tag on, and put his seal on, that is as far as it went.

"Q. 35. Did he put his seal on while you were using that scale during that four or five years?

"Ans. Always, every year; he never missed a year.

"Q. 36. When you lived on Pleasant street where was the scale which you have described as the Phinney scale?

"Ans. Right where I found them. I sold them to Adolphus Davis.

"Q. 37. Describe the scale as to whether it was in good working condition, when you left?

Objected to as calling for a conclusion.

"Ans. Always in good shape as long as we had it.

"Q. 38. What do you mean by "good shape"?

"Ans. Always ready to use.

Cross-examination.

By Mr. Zane:

"X Q. 39. From whom did you acquire the business on Pleasant street?

"Ans. Frank Mitchell, I believe his name was.

"X Q. 40. Do you know from whom he acquired it?

"Ans. John H. Devlin.

"X Q. 41. How long did Mitchell run the business, do you recall?

"Ans. I think less than a month.

"X Q. 42. The scale was in the store when you took possession?

"Ans. Yes, sir.

"X Q. 43. Up on the wall?

"Ans. Yes, sir.

1393 "X Q. 44. Did you ever test that scale, yourself?

"Ans. No, sir.

"X Q. 45. Did you ever see it set in balance?

"Ans. It always stood in balance.

"X Q. 46. What I mean to say is, did you see anybody ever put it in balance?

"Ans. The Sealer of Weights & Measures put his weights on.

"X Q. 47. That was testing weights, but I mean balancing the scale on zero?

"Ans. It never was out of order. He came round because he got a fee attached. You could not get away from that—and he put his tag on each time.

"X Q. 48. Did you ever see him take the scale apart to test it?

"Ans. No, sir.

"X Q. 49. You simply saw him put weights on?

"Ans. Yes, sir; and put a tag on and get his money.

"X Q. 50. Now, when you weighed on this pan did you throw things on the scale, just throw the meat on?

"Ans. You would not fire it on, you would put it on. You didn't throw it exactly; you put it on.

"X Q. 51. You weighed very fast sometimes, didn't you?

"Ans. I don't think so; I don't think so.

"X Q. 52. You did have occasion to weigh fast?

"Ans. Sometimes we did, yes; sometimes we were hurried a whole lot.

"X Q. 53. When you were hurried you just slammed the meat on and took it off?

"Ans. Well, put it on; I would not want to use the word 'slam' because the women folks would not like you to throw things on the scale that way.

"X Q. 54. You would not always wait till the scale stopped?

"Ans. We could not tell if we didn't.

"X Q. 55. You always wait?

"Ans. Yes, sir, sure.

"X Q. 56. Was there anything on the scale to stop the motion of it after the weight was put on?

"Ans. No; it stopped on the balance. It stopped when it showed what weight it was.

"X Q. 57. It would not run past, go past, and then give the poise accurate?

"Ans. Yes, it would dangle a little when you put it on.

1394 "X Q. 58. You had to wait for it to stop?

"Ans. Sure.

"X Q. 59. Did you ever test it a number of times in succession to find out whether it weighed the same each time?

"Ans. We always took the Sealer of Weights' word for it that the scale was right.

"X Q. 60. You took the sealing?

"Ans. Yes.

"X Q. 61. You never tested it yourself?

"No, sir; I would not know how. I certainly would not know how the scale stood to balance, and the Sealer of weights tested it as far as it went.

"Mr. Zane: I move to strike out his statement as not responsive.

"X Q. 62. Did you ever take, for instance, a given weight—we will say of one pound and six ounces, or two pounds and four ounces, or any particular weight?

"Ans. That was the Sealer of Weights' job; it warn't mine and I didn't do it.

"Mr. Zane: I move to strike out his answer as not responsive.

"The Witness: I didn't do it.

"X Q. 63. Just answer the question you are asked and let me finish the questions.

"Ans. Yes, sir.

"X Q. 64. And test that scale by putting that same weight on time after time to see whether it stopped exactly in the same place?

"Ans. That warn't my job, no.

"X Q. 65. You never did that?

"Ans. Certainly not; I hope not.

"X Q. 66. Now, you had in your store a spring balance scale?

"Ans. Yes, sir.

"X Q. 67. What kind of a scale was that?

"Ans. I don't know the name. It was a pan similar but there was a round dial with a hand that came round to the weight that was there. You stopped there. That would go by only if you dropped it on altogether.

"X Q. 68. That weighed in quarter-pounds?

"Ans. I think that weighed half-ounces. It weighed certainly ounces I think half-ounces, but I know it weighed ounces.

1395 "X Q. 69. You don't know the maker of the scale?

"Ans. No, sir.

"X Q. 70. Do you know whether it was a Chatilloh scale or not?

"Ans. I know nothing about the make of it, or the name of the maker.

"X Q. 71. You say you used it in the corned beef trade?

"Ans. I said it hung over the corner beef tray and we used that scale to weigh corned beef. The spring balance was over the other counter and we used it for weighing meat.

"X Q. 72. Now, corned beef was cold at how much a pound?

"Ans. All prices.

"X Q. 73. What was the range of prices when you were running the butcher shop there?

"Ans. What was the range?

"X Q. 74. Yes; in the corned beef, what was the highest price at which you sold and the lowest at which you sold?

"Ans. Well, different cuts run in the neighborhood of 5 to 10 or 12 cents. I think 12 cents was as high as it sold.

"X Q. 75. Five to ten or twelve cents?

"Ans. Yes.

"X Q. 76. The better quality you sold for 10 to 12?

"Ans. Yes.

"X Q. 77. The greater part of your sales, I suppose, were in lower values in corned beef, were they?

"Ans. I don't know that they were, no. They might run in between there, seven or eight or nine cents, you know, according to the piece used. Different pieces had a different price. Thick ribs, floating ribs, we got 10 or 12 cents for.

"X Q. 78. Did you sell by the quarter-pound, or by the exact weight?

"Ans. By the exact weight.

"X Q. 79. You didn't cut off a piece of meat and take the nearest quarter of pound as the weight?

"Ans. No, sir; if they took that weight that was on the scale they paid for it.

"X Q. 80. Now, after 1888 you never saw the scale again?

"Ans. No, no; I never saw it again. Mr. Davis ran the business, I don't know how long, may be two or three years, and closed it. I don't know what became of it.

"X Q. 81. Did you ever make an affidavit in regard to these matters?

1396 "Ans. Yes—I don't know, something similar to what you have asked me, not much different from that.

"X Q. 82. You say that you made an affidavit?

"Ans. I don't know—a year or two—I don't know that I made an affidavit. I know they came, asked me some questions, beyond that I don't recall.

"X Q. 83. Do you remember who it was that came and asked you questions?

"Ans. No; Mr. Phinney was one of them, and asked me about the scale; I don't know who the other party was. That is a year or two ago, may be two, I don't know.

"X Q. 84. You had a third scale, a platform scale?

"Ans. On the floor.

"X Q. 85. That was a scale of larger capacity?

"Ans. Yes; that was a scale, I guess, of 400 or 500 pounds, may be, something like that.

"X Q. 86. What was the capacity of the Phinney scale that you had?

"Ans. I don't know; I don't remember what was the capacity of that.

"X Q. 87. What was the largest weight you ever weighed on that, if you recall?

"Ans. I couldn't tell you.

"X Q. 88. Did you weigh as high as 15 pounds on it?

"Ans. I don't remember about that. The usual piece of corned beef would be, five, six, seven or eight pounds. I know it was big enough for any use we had for it.

"X Q. 89. Do you know what amount of tolerance was allowed by this Sealer?

"Ans. I don't know what you mean by the word. I never heard it used in relation to a scale; I have no doubt it belongs there but I never heard it.

"William H. Gillan.

"WILLIAM H. GILLAN, a witness on behalf of the defendant, having been duly sworn, deposes and says as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"Ans. William H. Gillan.
1397 "Q. 2. Where do you live?
"Ans. Pawtucket, Rhode Island.
"Q. 3. Where, in Pawtucket, do you live?
"Ans. 145 West avenue.
"Q. 4. What is your age?
"Ans. Forty-eight.
"Q. 5. What is your business?
"Ans. Grocer and marketman.
"Q. 6. How long have you been in the grocery and market business?
"Ans. Well, I have been in it—well, somewheres in the neighborhood of 29 or 30 years now.
"Q. 7. When did you start in that business, either for yourself or working for anybody else?
"Ans. Well, I started when I was about sixteen years old.
"Q. 8. With whom?
"Ans. With John H. Devlin.
"Q. 9. Where was John H. Devlin when you started with him?
"Ans. 78 River Street, Pawtucket.
"Q. 10. What did you do when you started in business with John H. Devlin? What was the nature of your work?
"Ans. Most anything, drove the team, worked in the store, and general man around the place.
"Q. 11. What sort of business did John H. Devlin conduct when you started at sixteen years of age?
"Ans. When I first went there he had just solely a market, meat market and provisions.
"Q. 12. How long did you stay with John H. Devlin?
"Ans. Well, in the neighborhood of sixteen, between sixteen and seventeen years I worked for him.
"Q. 13. After that time, after sixteen or seventeen years during which time you say you worked for him, what did you do at the expiration of that period?
"Ans. Well, I bought his business out. He wished to get out and I bought it.
"Q. 14. Are you now conducting that business.
"Ans. Yes, myself, yes, sir.
"Q. 15. When you started to work in the store or shop of John H. Devlin, were there any scales or weighing machines in use by him?

1398 "Ans. Well, he had a scale there, something similar to that one there, I should say it was a scale of that, of a—just exactly like that, not identical with that.

"Q. 16. You say a scale identical with that, this is known as Providence Exhibit 3: Was the scale that Mr. Devlin had identical with Providence Exhibit 3?

"Ans. Yes; the makeup of it was just the same, with two pigeon holes like that—I call them that—on the side, and the front of it was just the same as that, but all I thought of was that the openings was not quite so large.

"Q. 17. The pigeon holes?

"Ans. The pigeon holes, that is all the difference I could see in the construction, I think it is just the construction.

"Q. 18. Otherwise identical?

"Mr. Zane: I move to strike out the last question and answer as leading.

"Mr. Meads:

"Q. 19. Very well, Mr. Witness, describe, without reference to this scale now, as near as you can, the looks of the scale which was used by Mr. Devlin.

"Ans. Well, the scale, in the general appearance of it, is just the same as that. The drum worked down. The pan was down underneath and was set up on a couple of brackets from the bench, you know, and if I am not mistaken it weighed from two to twenty-five pounds, or something like that—no, from two to twenty-five cents, something like that.

"Q. 20. Two to twenty-five cents?

"Ans. I think that was it; I am not so sure, but I think it was from two to twenty-five cents it reckoned, and it was all reckoned on the cylinder inside the drum, or whatever you call the inside, to that amount.

"Q. 21. Now, describe the front of the scale: Was there any opening on the front of the scale?

"Ans. The front opening was just the same as that opening right there.

"Q. 22. As you looked through that front opening or slit what did you see, if anything, on the scale that was in Mr. Devlin's shop?

"Ans. The figures.

"Q. 23. And what were those figures?

"Ans. Well, the figures were numbers, of course, to correspond with the price per pound on the front of it there.

"Q. 24. What were those figures or numbers? Were they printed or written there?

1399 "Ans. They were printed on that.

"Q. 25. On what substance were they printed?

"Ans. Well, I should say paper, parchment is what they were on.

"Q. 26. If a weight was placed upon the pan below the scale what, if anything, happened to the paper on which these numbers were printed?

"Ans. Well, accordingly as you place anything on it, it would revolve around.

"Q. 27. Did you, at any time, see the inside of the wooden case which held that scale?

"Ans. I see it after Mr. Devlin had taken it apart in the store.

"Q. 28. Did you then see the paper cylinder on which these numbers were printed?

"Ans. Yes.

"Q. 29. What was the substance of which the ends of that cylinder were made?

"Ans. They were wooden ends.

"Q. 30. Just describe those wooden ends, as near as you can, Mr. Gillan.

"Ans. Well, in the shape of a wheel.

"Q. 31. What do you mean by 'the shape of a wheel'?

"Ans. Well, something cut out in three or four squares, you know—I don't know what you call it.

"Q. 32. Spokes?

"Ans. Three or four spokes there, and they were wooden. I don't know what you would — it. On the ends, of course, was formed just the same as a rim of a wheel, just all in one piece.

"Q. 33. The ends were in one piece?

"Q. 34. The wheel itself was all in one piece?

"Ans. With the pieces cut out; the pieces were cut out in between just the same as the spokes of a wheel but in the construction of it, you see, it was one solid piece they were cut from.

"Q. 35. Mr. Witness, in your presence, I have taken the wooden case from Providence Exhibit 3 apart so that there appears in the exhibit the paper cylinder of such exhibit: With that exhibit before you will you describe the scale used by Mr. Devlin and you, with the cylinder in question?

"Ans. Well, that there corresponds with just what we had.

1400 "Q. 36. What do you mean by 'corresponds'?

"Ans. I mean that the drums, the cylinders, were in two parts with the gearing going up through the center and the spring at the top, and accordingly as the stuff would go on this here—what you call it there—gearing would come down. The teeth would project below.

"Q. 37. Now, as to the cylinder itself, the paper cylinder and the ends thereof: How did the one that Mr. Devlin had compare with Providence Exhibit 3?

"Objected to.

"Ans. They were the same, I should say just the same as that.

"Q. 38. During the time that you were in the employ of Mr. Devlin, did you ever use that scale that you described?

"Ans. The scale, use it?

"Q. 39. Yes.

"Ans. Oh, yes, all day long mostly.

"Q. 40. For how long a time was that scale used by you or Mr. Devlin, to your knowledge?

"Ans. I don't know; a good many years. I couldn't say the length of time; a good many years.

"Q. 41. Where was the scale when you purchased the place?

"Ans. The scale was in possession of Mr. Devlin.

"Q. 42. During the time that you were in the employ of Mr. Devlin do you know whether that scale was ever inspected, or sealed, by any public official?

"Ans. Why, yes; the Inspector, Sealer of Weights there, Mr. Crawford was the only man that I know of at the time that the scale was in his possession was James Crawford, the State Sealer of Weights.

"Q. 43. Did you ever see Mr. Crawford there?

"Ans. Oh, yes; I am personally acquainted with him.

"Q. 44. Did you ever meet him at the place?

"Ans. Oh, yes, indeed; I was there every time that he came there. He mostly came in the afternoons.

"Q. 45. What did he come there for, if you know?

"Objected to.

"Ans. Well, he came there to inspect the scales to see whether they were true or not, and the measures, and things that were used, anything in weighing out or measuring stuff, all had to be sealed when he came there.

"Q. 46. Did you ever see him seal the scale in question?

1401 "Ans. Why, yes, sir; I have seen him seal the one that we had there. I have seen him seal it.

"Q. 47. When you started to work for Mr. Devlin was the scale there?

"Ans. The scale was there the day that I came in the store, in use, the only scale that he used was that scale, when I came there first.

"Q. 48. Afterwards did he get any other scales?

"Ans. Well, it seems to me he did at the last there, I think he did get a beam scale, if I am not mistaken.

Cross-examination.

By Mr. Zane:

"X Q. 49. What year was it, Mr. Gillan, that you bought the store at 78 River street?

"Ans. Well, I have forgotten now. It is about twelve years ago; that would be, what?

"X Q. 50. That would be 1905.

"Ans. 1905, yes, I should judge so. I got it on record there but I have forgotten all about it.

"X Q. 51. Up to that time you had been working for Mr. Devlin?

"Ans. Yes, sir.

"X Q. 52. That is the John H. Devlin who is still living?

"Ans. John H. Devlin, yes sir.

"X Q. 53. When you bought did you notice this scale?

"Ans. I did not.

"X Q. 54. Do you know what became of it?

"Ans. It remained in his possession, I believe: Yes, I guess it did.

"X Q. 55. Now, you say that you saw the inside of the scale when Mr. Devlin took it apart?

"Ans. When he took it apart.

"X Q. 56. When was that?

"Ans. After he got out of business he brought the scale there because——

"X Q. 57. After he had sold to you?

"Ans. After he had sold to me.

"X Q. 58. He brought the scale to the store?

"Ans. Yes, why because——

"X Q. 59. I didn't ask you why: He brought the scale to the store and it was taken apart there by whom?

"Ans. By him.

1402 "X Q. 60. When was that?

"Ans. Well, I think that was shortly after he had sold out to me; I couldn't say just what the date was, or anything of that sort.

"X Q. 61. While you were there working in the store, before the scale was taken away by Mr. Devlin, you never saw it taken apart?

"Ans. Not at that time, no, sir.

"X Q. 62. Was there any distinguishing mark on the scale by which you could tell that this scale that Mr. Devlin brought back there was the same scale that had been in the store?

"Ans. Well, not that I am sure of but it was the identical scale, of course.

"X Q. 63. Why do you say it was the identical scale? How do you know it was identical?

"Mr. Meads: If you haven't finished your answer, finish it.

"Ans. There was a plate on the scale that was marked "William H. Phinney", and the date was on.

"By Mr. Zane:

"X Q. 64. And the patent date?

"Ans. The date of the patent.

"X Q. 65. Was on?

"Ans. Yes.

"X Q. 66. Anything else besides the general appearance?

"Ans. Just the general appearance was identically the same.

"X Q. 67. Now, when he took the scale apart there at your store what was done with the different parts? Were they put together again?

"Ans. Well, he took them and took them away from the store.

" XQ. 68. When he took it away from the store was the scale put together again, or was it still apart?

"Ans. Well, I understand that was put together again, as he told me. I asked him——

"Mr. Zane: I move to strike out the answer as not responsive and as incompetent.

"X Q. 69. When you last saw the scale was it apart or together?
"Ans. When I last saw the scale it was together.
"X Q. 70. Where did you last see it?
"Ans. I think at his house. He had it at his house.
"X Q. 71. When the scale left your store after having been taken apart, was it still apart?
1403 "Ans. At that time it was apart.
"X Q. 72. Then afterwards you saw the scale at his house?
"Ans. At his house.
"X Q. 73. It was together.
"Ans. It was together, yes.
"X Q. 74. But you didn't see it put together again?
"Ans. No, no.
"X Q. 75. When the scale was in the store, while you were working for Mr. Devlin, did you ever see the scale balanced?
"Ans. I have seen—what do you mean, the Sealer weigh it or balance it in that manner?
"X Q. 76. No. Did you see Mr. Devlin balance it?
"Ans. I don't understand the question.
"X Q. 77. You know a scale must balance on zero?
"Ans. Yes; balance when there was nothing on it to balance it.
"X Q. 78. Did you ever see him balancing it?
"Ans. Not that I know of.
"X Q. 79. Not in all that length of time, sixteen or seventeen years that you worked for him?
"Ans. An adjustment, you mean, to the scales?
"X Q. 80. Yes.
"Ans. Not that I know of.
"X Q. 81. By Mr. Devlin?
"Ans. Not by Mr. Devlin, no.
"X Q. 82. Or by any one there in the store?
"Ans. No, not that I ever remember of.
"X Q. 83. Who else worked there in the store?
"Ans. Nobody but he and I.
"X Q. 84. And how much of a business did he have?
"Ans. He had probably about $300 a week, somewhere in the neighborhood of that. He done a business possibly of $300 a week.
"X Q. 85. $300, sales?
"Ans. Sales a week.
"X Q. 86. In all that length of time he had no other clerk than you?
"Ans. Not in that length of time, nobody but me.
"X Q. 87. How old were you when you first went to work for him?
"Ans. About sixteen.
"X Q. 88. After you acquired the store did Mr. Phinney ever sell you a scale?
"Ans. No, sir.
1404 "X Q. 89. Did he ever try to sell you a scale?
"Ans. No, sir.

"X Q. 90. Do you know of him trying to sell anybody else a scale?

"Ans. No; I didn't hear anything about it at all in any way that I know of.

"X Q. 91. You say, after a while, Mr. Devlin bought another scale: What kind of a scale was that?

"Ans. Well, he bought a beam scale.

"X Q. 92. A scale that you——

"Ans. (Interrupting.) Running——

"X Q. 93. Work on by moving a poise along a beam?

"Ans. Yes; that is it, yes.

"X Q. 94. Did you ever see that scale?

"Ans. Yes, all the time up till the time when I bought him out, then I discarded it.

"X Q. 95. And you bought a scale?

"Ans. I bought the Dayton scale, computing scale.

"X Q. 96. Now, this sealer, Mr. Crawford: Can you tell how many times you saw him seal that scale?

"Ans. Now, I couldn't just say but it was every year. He came once in a year, always in the fall, and sealed the scale and put the seal on the side of the scale same as before.

"X Q. 97. Put a piece of paper on?

"Ans. A round piece of paper with the date of the sealing—the date when he sealed it and the seal of the city.

"X Q. 98. Did you know how he tested the scale?

"Ans. By weights, by brass weights.

"X Q. 99. He used brass weights always?

"Ans. I think it was, on these kind of scales; and iron weights, on the platform scales.

"X Q. 100. Now, did you know, or were you informed in any way what kind of tolerance was permitted in the scale?

"Ans. Well, I don't get your question.

"X Q. 101. You, then, knew nothing about that?

"Ans. No——

"X Q. 102. Just answer, please.

"Ans. I don't know anything about it.

"X Q. 103. Did you begin to use that scale as soon as you went into the store?

"Ans. I did.

"X Q. 104. Who told you to use it?

"Ans. Well, the first day I went there I asked him, I am
1405 sure, how this thing worked, meaning the scale, as to how it worked.

"X Q. 105. And he then told you how the scale worked?

"Ans. Yes; he informed me how it worked.

"X Q. 106. Did you, when you used that scale, do any calculating yourself?

"Ans. I never did.

"X Q. 107. You went by the figures?

"Ans. I went by the figures as they came up, the price and the number of pounds.

"X Q. 108. Was there an indicator on the scale according to the weight?

"Ans. Nothing more than the number, to correspond as the indicator came up to the center of the indicator there, that was the price that it came to.

"X Q. 109. Suppose the number were not at the center?

"Ans. Then you would have to gauge it accordingly.

"X Q. 110. Then you approximated it?

"Ans. That way you would have to do it, I should judge outside.

"X Q. 111. How close did you weigh your meat there?

"Ans. Well, we weighed it 16 ounces.

"X Q. 112. Weighed it to ounces?

"Ans. Right down to ounces—well, not ounces, if it was a half a pound or three-quarters of a pound; most of them there buy around that; of course, it was half of the pound.

"X Q. 113. You weighed them a half pound or quarter?

"Ans. Quarter, or half pound, or a pound.

"X Q. 114. Did you do the cutting of the meat yourself?

"Ans. When he was out.

"X Q. 115. When you cut a piece of meat and put it on the scale you could not always cut a half a pound, could you?

"Ans. Well, no, whatever it came to.

"X Q. 116. Well, now——

"Mr. Meads: Finish your answer.

"By Mr. Zane:

"X Q. 117. Did you, when you had cut a piece of meat and put it on the scale and you hadn't cut it to the half pound, did you sell it for half a pound?

"Ans. No; whatever it came to on the cylinder, on the price per pound below, they paid for it.

"X Q. 118. That is—'below,' what do you mean by 'below'?

"Ans. I mean the price per pound it was on.

1406 "X Q. 119. On the face of the scale?

"Ans. On the face of the scale, and what it showed up on the inside, why, I sold it for that at the price per pound below.

"X Q. 120. Now, how close did you weigh, to the ounce?

"Ans. Well, I suppose so. I don't think so, so I really don't know as far as that goes. I haven't any idea. Of course, if it was six ounces, why, it was so much money, if it was a quarter of a pound it was so much money. I naturally took the figures from the inside.

"X Q. 121. Suppose it was seven ounces, what did you do then, take the figure for the seven ounces?

"Ans. Of course, I would gauge it as near as I could.

"X Q. 122. Did you take the figure for the seven ounces?

"Ans. I don't know whether it reckons up seven ounces or not really.

"X Q. 123. The scale does not, does it?

"Ans. What is that?

"X Q. 124. The scale does not reckon any odd ounces, only in every two ounces?

"Ans. Every two ounces.

"X Q. 125. *Who*, when you had a weight between, for instance, six and eight ounces, what did you do?

"Ans. Well, that would have to be done outside the figuring on the cylinder.

"X Q. 126. Did you do that?

"Ans. I don't know really; I couldn't say.

"X Q. 127. You don't know whether you did or not?

"Ans. I couldn't say anything about it now. The time has gone so far that I really don't know, but I know that mostly I took the figures from the inside.

"X Q. 128. Now, when Mr. Devlin brought that scale down there and took it apart was there any one with him?

"Ans. No; I think not. I think it was in the afternoon he and I were together.

"X Q. 129. He just brought the scale in?

"Ans. Well, he brought the scale in there because, there is no reason why I should answer that question, is there?

"X Q. 130. Well, you tell me why.

"Ans. Because he *h*ade his headquarters there all the time, you know what I mean. He lived on the street there and he came in every day just the same.

"X Q. 131. And one day he came with the scale?

1407 "Ans. Yes.

"X Q. 132. You didn't know why he brought it in?

"Ans. No; I think it was curiosity.

"X Q. 133. Oh! curiosity?

"Ans. I think so.

"X Q. 134. He wanted to see the inside?

"Ans. And I did.

"X Q. 135. Were you thinking of buying the scale?

"Ans. Oh, no; I didn't want the scale.

"X Q. 136. You would not have it?

"Ans. No; he would not let me have them, in the first place.

"X Q. 137. Why did you say you didn't want the scale?

"Ans. I didn't want it because I could not get it, in the first place, but I wanted another scale.

"Mr. Meads: Mr. Zane, you have served notice for the production of the original affidavit by Mr. Gillan, the witness, which affidavit I received by mail yesterday, here in Providence, and which affidavit, after adjourment, and which affidavit I submit to you if you wish to use it.

"Mr. Zane: Did you get any other affidavit?

"Mr. Meads: I did; after adjournment, yesterday, I received a telegram at the hotel in Providence—when I say 'I'—Mr. Hibben received a telegram that Mr. Rector had mailed this affidavit and other affidavits mentioned in the notice of counsel, which I have here, and all of which I submit to counsel as he wishes, as we have already shown our willingness to present a copy.

"(By Mr. Zane:)

"X Q. 138. On the second day of January, 1913, did you sign an affidavit in this case?

"Ans. Yes, sir.

"X Q. 139. Now, you never saw that scale taken apart but once did you?

"Ans. Well, not only taken apart but I have seen it—he didn't take it that day from there, you know; I have seen the scale after that, you know.

"X Q. 140. Apart?

"Ans. Apart, yes; it was not taken away from the place on that same day.

"X Q. 141. It stayed in your place?

"Ans. It stayed there.

"X Q. 142. It stayed there apart?

"Ans. It stayed there apart.

1408 "X Q. 143. And that is the only time, those times while it was in your store after you bought Mr. Devlin out, that you saw it apart?

"Ans. That is the only time.

"Mr. Meads: Mr. Zane, I have here now, received yesterday by mail after adjournment, the affidavits, original affidavits of Thomas Z. Phinney, E. Willard Horton, William M. Raymond, John Devlin and William H. Gillan, which I now submit to you if you desire them for such use as you care to make of them.

"Mr. Zane: From whom did you receive them?

"Mr. Meads: From Mr. Edward Rector, of Chicago, at the Crown Hotel, in the City of Providence, being the affidavits mentioned in your notice, dated February 16, 1917. Mr. Thomas Z. Phinney is in the room, present for further examination if you desire. Last night you requested that he be present.

"Mr. Zane: Have you any other witnesses?

"Meads: No.

"Mr. Zane: Is this all?

"Mr. Meads: This is all.

Thomas Z. Phinney.

"THOMAS Z. PHINNEY is recalled for further cross-examination, as follows, by Mr. Zane:

"X Q. 630. Mr Phinney, you spoke of the place Central Falls: That is a part of Pawtucket, is it not?

"Ans. No, sir; it is not. It is a separate city, about a half a mile beyond Pawtucket.

"X Q. 631. They have the same railroad station?

"Ans. Yes, at present they do, but they never used to have. It is only the last year or two.

"X Q. 632. You say that the inside, the mechanism of Providence Exhibit 1, is the same as that of Providence Exhibit 2?

"Mr Meads: I object to the question. The witness has not made any such statement.

"Mr. Zane: The record will show that.

"X Q. 633. Do you say that, or do you not?

"Ans. Which is No. 2?

"X Q. 634. The brass one is 1 and the iron is No. 2?

"Ans. Well, practically they are, but there is a little difference in the hanging of the spring simply because I hung that one
1409 up in the case, that was made different. I had to hang it different and being for my own personal use I could do it.

"X Q. 635. Has Providence Exhibit 1 any core?

"Ans. I don't think it has.

"X Q. 636. You know, don't you?

"Ans. If I recollect it is hung through the loop.

"X Q. 637. It has no pin for graduating it either has it?

"Ans. Yes; it turns round through the loop.

"X Q. 638. Has it a pin in it?

"Ans. No, sir; the scale goes through the loop.

"X Q. 639. It has no pin and no core?

"Ans. No, sir; but it can be graduated just the same, under the same principle.

"X Q. 640. Now, how do you graduate Providence Exhibit No. 1?

"Ans. By turning the pin, the loop that the scale hooks into, the spring hooks into, by turning that round so that it will work down the spring same as a pin would in the core.

"X Q. 641. You mean, by working the spring further on to the loop?

"Ans. We take the spring and this little loop that the spring hooks into, by turning that round it threads down on the spring which graduates and regulates the spring in the same way that the core would regulate it.

"X Q. 642. By putting the loop further into the spring?

"Ans. Yes.

"X Q. 643. Or by taking it further out towards the end of the spring?

"Ans. Yes, sir; that scale being the only one of that pattern we didn't bother to build up anything for it seeing it was not going out of my possession.

"X Q. 644. Now, how did you fix the point on the spring at which this loop is attached?

"Ans. Why, there is a check bolt on it so that when it is where it balances we can set this bolt up and it keeps it solid.

"X Q. 645. Where is the bolt in the loop?

"Ans. At the top there, and it screws against the top of the machine.

"X Q. 646. Now, you put this loop at a particular point on the spring, don't you?

"Ans. Yes, sir.

1410 "X Q. 647. How did you determine that?
"A. By test weights.
"X Q. 648. By testing it by the weights put on the pans of the scale?
"Ans. Yes; same as we test any scale.
"Mr. Zane: I move to strike out his answer—'same as we test any scale'—as not responsive.
"X Q. 649. This is the only scale you have ever put together?
"Ans. No, no; but that is the only scale ever was built of that material.
"X Q. 650. How many scales did you ever put together?
"Ans. I think, three and two is five, that I can think of. I put three that I sold and two for my own use.
"X Q. 651. Where is the other one for your own use?
"Ans. Well, I couldn't say now. It was sold. I let a party have it two or three years ago, I guess, a scale company.
"X Q. 652. Three years ago: What scale company was it?
"Ans. The Standard Scale Company.
"X Q. 653. Where is that located?
"Ans. I couldn't tell you. It was bought through an agent of theirs.
"X Q. 654. The Standard Scale Company?
"Ans. Yes.
"X Q. 655. Now, three scales, you say, you put together: When was that?
"Ans. I couldn't say, but it was somewhere twenty or twenty-five years ago.
"X Q. 656. Twenty to twenty-five years ago?
"Ans. Yes.
"X Q. 657. Those were put together out of parts that your father had left?
"Ans. Yes, sir.
"X Q. 658. What was the man's name?
"Ans. Well, I couldn't say positively, but I was led to believe afterwards——

"Mr. Zane: We object to what he was led to believe as incompetent.

"X Q. 659. Did you see those three at the same time?
"Ans. No, sir; I should judge about a year apart.
"X Q. 660. That is, a year between each sale?
"Ans. Yes, sir.
"X Q. 661. So that between the first and last sale there was a period of two years?
1411 "Ans. Yes, sir.
"X Q. 662. It was the same man, was it, that bought each one of those scales?
"Ans. Yes, sir.
"X Q. 663. Where did you deliver the scales to that man?
"Ans. At my shop. He came to the shop in Pawtucket.
"X Q. 664. There was no writing passed?
"Ans. No, sir.

"X Q. 665. You did not make out a bill?
"Ans. No, sir; he simply passed the check over.
"X Q. 666. How much did you sell each of those scales for?
"Ans. If I recollect right I got $15 apiece for them.
"X Q. 667. What kind of a casing?
"Ans. Well, I couldn't say but I think that they were the hanging wooden case though I wouldn't say what they were.
"X Q. 668. Hanging what?
"Ans. Hanging wooden case or else the hanging iron, and I couldn't say which.
"X Q. 669. Did you ever see either of those scales again?
"Ans. I did not.
"X Q. 670. About what year was the first of those sales?
"Ans. I couldn't tell you.
"X Q. 671. Well, tell us as closely as you can between the limits, the years.
"Ans. Between 1895 and 1890, I should judge.
"X Q. 672. Between 1885 and 1890: And the whole three sales were in that period?
"Ans. Yes, sir.
"X Q. 673. Did you see that man after you made the last sale to him?
"Ans. I never saw the man before, nor after. The only time I ever saw him was the day that he came up and ordered the scales and came after them.
"X Q. 674. And his name you don't recall?
"Ans. I don't, not positivley.
"X Q. 675. Now, this scale you sold three years ago to the Standard Scale Company, did the representative of that company come to you?
"Ans. Yes, sir.
"X Q. 676. In Pawtucket?
"Ans. In Providence; I was living at Providence at this time.
1412 "X Q. 677. What did you get for that scale?
"Ans. Well, I practically didn't sell the scale. I made him a present of it and he made me a present for that and other services.
"X Q. 678. That is, you gave him the scale outright?
"Ans. Yes; practically I gave him the scale.
"X Q. 679. Now, what did he give you for services?
"Ans. Well, I don't recollect. I had been getting these affidavits.
"X Q. 680. I didn't ask you that: I just asked you how much?
"Ans. Well, I don't recollect now what I did get.
"X Q. 681. Can you approximate it?
"Ans. I can't.
"X Q. 682. Was it $100?
"Ans. I don't think it was.
"X Q. 683. Was it $50?
"Ans. I couldn't say what it was.

"X Q. 684. Was it between $50 and $100?

"Ans. I couldn't tell that. I don't recollect now.

"X Q. 685. Could it have been more than $100?

"Ans. I know it wasn't more than $100 because if it was I would have been so high toned I would not have known you for a week.

"X Q. 686. Now, what services did you say you had rendered?

"Ans. I went with their agent while he went after these affidavits that you have the benefit of here, that was taken some three or four years ago,—I hunted the parties up for him,—and it was the scale those affidavits, most of them, was taken on.

"X Q. 687. You had looked up the witnesses, that was it, was it?

"Ans. Yes, sir.

"X Q. 688. And you had given an affidavit yourself?

"Ans. Yes, sir.

"X Q. 689. Now, the effect of puting the pin further down into the spring is to shorten the length of the spring that is under tension when anything is being weighed on the scale, is it not?

"Ans. Yes, sir.

"X Q. 690. If your scale, when you tested it, should overweigh, that is to say a pound weight would put the scale past the pound indication, would you shorten your spring or lengthen it?

1413 "Ans. Well, you mean, if the drum came round beyond the point? I should not touch the spring at all, just raise the pin.

"X Q. 691. If you raise the pin——

"Ans. Raise the whole thing.

"X Q. 692. You would not change the pin at all?

"Ans. Not in the spring itself, raise the whole thing.

"X Q. 693. If you shorten the spring what would be the result?

"Ans. Well do you mean the whole spring? Why, I would turn the——

"X Q. 694. You have already answered; that is, you move the pin up and down in the spring, you shorten the spring, don't you, or lengthen it as the case may be?

"Ans. Yes; but it depends whether you want to turn that drum around — a different place to balance it, or whether you want to make your tension different from your spring.

"X Q. 695. Yes; You change the place of the pin in the spring to change the tension of the spring, don't you?

"Ans. Yes, sir.

"X Q. 696. Now, on that part of the spring which is above, the pin does not act at all, does it?

"Ans. It acts in turning your drums round, in setting them you set your drums from it.

"X Q. 697. Does it act by way of tension?

"Ans. No, sir; it acts by turning it up and on the gears. It draws the gears round.

"X Q. 698. It is simply a connection then?

"Ans. Yes.

"X Q. 699. A dead connection?

"Ans. Yes, sir.

"XQ. 700. Now, then, the point I am trying to get at with you is this: Suppose you find that your pin is in the wrong place in the spring, what would indicate that to you?

"Ans. Well, in putting the test weights on, for instance, if it went a pound, then when you came round to ten pounds it had lost an ounce or a quarter of an ounce——

"X Q. 701. Or gained—either one—it would show that the tension of the spring was not uniform." (No answer shown.)

"X Q. 702. Now, having arrived at that point, suppose that your spring had gained what would you do, raise or lower your pin?

"Ans. If I recollect right we raised those pins in that way but it — so long ago since I gauged them that I wouldn't say positively.

1414 "X Q. 703. You can't say now?

"Ans. No; I have been out of the scale business so long I would have to begin and try it once or twice but I think we raised the pin and that made more tension.

"X Q. 704. Yes; you brought more of the spring into play?

"Ans. Yes.

"X Q. 705. And when you brought more spring into play that made more tension?

"Ans. Yes.

"X Q. 706. That is your recollection of it?

"Ans. Yes; it is so many years since I have hung up scales or had anything to do with them, those little details I have forgotten and I would have to work over them a little more to bring them back into mind.

"X Q. 707. Now, in this scale, Providence Exhibit No. 1, your spring is suspended from the top of the scale by a loop that is around the spring at the side of the spiral, is it not, and on one side of the spiral?

"Ans. Yes.

"X Q. 708. So that as you pull down on the spring the spring assumes a partly curved form, does it not?

"Ans. Yes, sir.

"X Q. 709. What effect has that upon the tension of the spring?

"Ans. Well, it would not vary enough on the tension of that spring to amount to 1/1000 part of an ounce, not in that particular case, in such a small weight as we were using.

"X Q. 710. In a weight of 14 pounds?

"Ans. Yes.

"X Q. 711. That change in the direction of the spring, so that the spring becomes partly circular in form, does not interfere with the tension of the spring at all?

"Ans. Not enough to hurt anything of that. I would not put a scale on the market that way, but for my own use rigged it up for that purpose—that scale was only made for my own use and not to sell but to weigh with.

"X Q. 712. You say you would not put such a scale as that on the market?

"Ans. No; because it wasn't finished up.

"X Q. 713. Finished in what way?

"Ans. Well, if we were going to put a scale on the market we would put a core in there and hung it straight, had it nickle plated, finished up in shape

"X Q. 714. Would you put a core in there so that the spring——

1415 "Ans. Would have been perfectly straight.

"X Q. 715. Would be straight and not bent?

"Ans. Yes, sir.

"X Q. 716. And in order to do that you have to have a spring attached on both sides of the spring on its outer circumference?

"Ans. Yes.

"X Q. 717. Did you find, in actual use of this scale, that the cylinder rubbed against the center?

"Ans. That rubbing—that scale was lent to Howson & Howson and went to Washington in perfect shape. When it came back it was all dented up and rubbed. We could see the dents on the side where I have straightened them out. You could not turn it when it came back.

"X Q. 718. You could not turn it at all?

"Ans. You could pull it around by main force but it would not turn. It was banged right in.

"X Q. 719. Now, that scale, Providence Exhibit No. 1, is the scale that you say you used in your family for how many years?

"Ans. Which is Providence No. 1?

"X Q. 720. The brass one.

"Ans. It was not used in my family at all. It was used in my shop.

"X Q. 721. For how many years?

"Ans. Well, I couldn't say because we used it up to the time it went to Washington, then I made up another one and it has gone to Washington.

"X Q. 722. How long was it you used it up to the time it went to Washington?

"Ans. Well, ten or fifteen years, I guess it was in use.

"X Q. 723. During that time did you take the scale apart?

"Ans. Well, I have no recollection whether I ever took it apart or not.

"X Q. 724. You have no recollection of readjusting that scale during that length of time?

"Ans. No, I have not. If it needed it I would naturally have done it.

"Mr. Zane: I move to strike out the latter part of the answer as not responsive.

"X Q. 725. Since you received any of these scales back from Washington have you tested them?

"Ans. I have not.

"X Q. 726. You have not attempted to see whether they weigh accurately or not?

1416 "Ans. I have not.

"X Q. 727. You think the springs that were in these scales were bought from Fairbanks?

"Ans. I don't know, but I have an idea that they were; I am not positive.

"X Q. 728. Did you ever test one of these springs outside of the scale?

"Ans. I never have.

"X Q. 729. Were the springs that you had all of the same size?

"Ans. They were not. We had two sizes.

"X Q. 730. What was your larger size for?

"Ans. For a scale similar to that picture that is on the circular, similar to that drum on the end of the table (referring to Providence Exhibit 4). I forget the number—a 30 pound or a 24-pound scale, whatever it is.

"X Q. 731. 24-pound scale?

"Ans. Yes.

"X Q. 732. And the other size of spring was what you put in these wooden covering springs?

"Ans. Some went into the wooden, the brass and the iron.

"X Q. 733. What was the size of your larger sized spring? How do you describe it?

"Ans. Well, I couldn't say what length nor the diameter was without I went home and measured them.

"X Q. 734. You could not tell us the length of the coil?

"Ans. Not without going home to measure one.

"X Q. 735. You could not tell the diameter of the coil?

"Ans. I could not.

"X Q. 736. Or the diameter of the wire?

"Ans. I could not.

"X Q. 737. And your answer would be the same for the smaller sized spring?

"Ans. The same; it is so many years since I have handled any of these that I have lost track of them although I have them at home.

"X Q. 738. Have you any idea how many springs you have there?

"Ans. I have not. I have a great deal of stuff at home packed away there.

"X Q. 739. Have you any idea how many of either size you have?

"Ans. I don't—I have not.

"X Q. 740. Or of any size?

1417 "Ans. No, sir. I don't.

"X Q. 741. Have you assisted any of these gentlemen in looking up witnesses?

"Ans. I gave them the names of the witnesses, told them what I could, same as I would tell any gentleman if any man came and asked me for information and I could help him, I would help him same as the Dayton man came some years ago and asked me to help him. I gave him what he wanted.

"X Q. 742. Have you received from any of them any compensation at all?

"Ans. I have received compensation from every one, for my time, and that is all.

"X Q. 743. For the time consumed?

"Ans. For my time that I spend.

"X Q. 744. Now, when these affidavits were gotten up in 1913, did you assist or do anything by way of looking up witnesses then?

"Ans. I went around with a gentleman and looked them up with -im, showed him where they lived.

"X Q. 745. Did you receive compensation then?

"Ans. I received compensation for the time I spent.

"X Q. 746. How much did you receive?

"Ans. I don't recollect all the time.

"X Q. 747. Can you give us any idea?

"Ans. I can't.

"X Q. 748. Since that time have you received any compensation?

"Ans. No; I have not, only as I say when I got—when he paid me for my time. They wanted a scale and I made him a present of it. I thought it would never be of any use. We got pretty friendly. I didn't know at the time it was going really to the Scale Company. I thought it was going to the agent.

"Mr. Zane: I move to strike out the statement—'I didn't know it was going to the Scale Company'. I thought it was going to the agent'—as not responsive.

"The Witness: It would not have made any difference.

"X Q. 749. This present hearing, have you received any compensation yet?

"Ans. No, sir: I have not.

"X Q. 750. Have you been promised any?

"Ans. I have been promised nothing more than pay for my time.

"X Q. 751. Have you assisted in looking up witnesses?

1418 "Ans. I have.

"X Q. 752. How much time have you spent in that?

"Ans. Well, I have spent part of Friday, some of Saturday, Sunday, and I have been up here.

"X Q. 753. What rate of compensation have you stipulated for?

"Ans. I haven't stipulated any.

"By agreement of parties, in the presence of the Magistrate, the signatures of the foregoing deponents are waived.

"Mr. Zane: It now appearing that the witnesses whose depositions have been taken are witnesses who testified regarding to one scale, and that scale the Phinney Patented Scale, the patent papers for which were offered in evidence upon the trial of the original issue in pursuance of the pleading the answer of the defendant alleging and setting up such patent and it appearing that all this evidence has heretofore twice been presented to the circuit court of appeals, and has been by that court rejected, and it further appearing that this same

evidence has been offered before the master in this court and the evidence rejected by the master, the plaintiff now moves and presents the motion both before the master and to the court that these depositions be stricken from the files, when filed, and that the costs of taking such depositions be assessed against the defendant.

"(Depositions closed.)

"STATE OF RHODE ISLAND, &C.,
"Providence, sc:

"I, George Farnell, a Notary Public duly commissioned and engaged Do Hereby Certify that the within named Thomas Z. Phinney, John H. Devlin, Charles H. Tierney, E. Willard Horton, Joseph McNally, Daniel C. Fallon and William H. Gillaw were by me severally sworn to testify the truth, the whole truth and nothing but the truth; that the depositions as above set forth were reduced to shorthand writing by me; that the aforegoing transcript was made under my direction; that the reading of the said depositions to, and the signing by, the said deponents was waived, in the presence of the Magistrate, by counsel for the respective parties herein; that the said depositions were taken pursuant to notice hereto attached, in behalf of the defendant, at the time therein specified, and were begun in my office on said 21st day of February, 1917, and continued to be taken in Room 309, Federal Building, in the City of
1419 Providence, and continued from day to day; that said deponents live at a greater distance from the place of trial than one hundred miles; that said depositions are to be used in the trial of a cause now pending in the United States District Court for the Northern District of Illinois, Eastern Division, wherein The Computing Scale Company is plaintiff and Toledo Computing Scale Company is defendant, being No. 30024 in equity in said court; that the adverse party was represented by counsel at the taking of said depositions.

"I further certify that I am not interested in said cause nor counsel or attorney of either party.

"Witness my hand and seal at Providence in said County this 27th day of February, A. D. 1917.

"(Signed) GEORGE FARNELL,
"[Notarial Seal.] *"Notary Public.*

"United States District Court, Northern District of Illinois.

In Equity.

No. 30024.

"THE COMPUTING SCALE COMPANY

"vs.

"TOLEDO COMPUTING SCALE COMPANY.

"Appearances:

"John M. Zane, Esq., on behalf of Complainant.
"Samuel E. Hibben, Esq.
"Albert H. Meads, Esq., on behalf of Defendant.

"Parties met at 10 A. M. at the office of Fritschie, Kruse & Winchester, 410 Spitzer Building, at the corner of Madison and Huron Streets in the City of Toledo, in the State of Ohio, and by agreement adjourned for the taking of the depositions mentioned in the notice to the general United States court room in the Federal Building in said city of Toledo.

1420 "ORWELL C. REEVES, a witness called on behalf of the defendant, being by me first duly cautioned and sworn, testified as follows:

Direct examination.

By Mr. Meads:

"Q. 1. What is your name?
"A. Orwell C. Reeves.
"Q. 2. You are the factory superintendent for the Toledo Scale Company?
"A. I am.
"Q. 3. And have been such factory superintendent for how long?
"A. I went with the company in 1905 and was master mechanic about a year, and assumed the duties of superintendent, and have been superintendent ever since.
"Q. 4. As factory superintendent you have charge of the manufacturing of the products of the Toledo Scale Company?
"A. I do.
"Q. 5. Did you ever at any time examine a weighing device or scale marked 'Providence Exhibit 3,' and an exhibit in the case of The Computing Scale Company against Toledo Computing Scale Company, In Equity No. 30024, and part of the deposition of Thomas Z. Phinney?
"A. I have seen such a scale and examined it.
"Q. 6. When did you first examine such scale?

"Mr. Zane: We now object to the taking of the deposition of this witness or of any of the witnesses noticed for to-day, for the following reasons:

"(1) That there is no right to take depositions in the case at the present time.

"(2) That this evidence has been excluded by the Master.

"(3) That the evidence is incompetent, irrelevant and immaterial upon the issues—(*a*) because this issue has been disposed of by the Circuit Court of Appeals in its opinion, and (*b*) that on the accounting the testimony has no relevancy.

"(Question read.)

"A. December 18, 1916.

"Q. 7. Where?

"A. Providence, R. I.

"Q. 8. Where was the scale at the time that you made that examination?

"A. In the home of Mr. Thomas Z. Phinney.

1421 "Q. 9. At that time what did you do in the examination which you made of the device?

"A. Made an examination of the case of the scale, an examination of the chart construction.

"Q. 10. Did you take any measurements?

"A. I took measurements.

"Q. 11. With what instruments?

"A. I took measurements of the chart with micrometers, calipers and measuring scale.

"Q. 12. When next after that examination in December did you see that scale?

"A. March 3, 1917, in the Federal court room in Chicago.

"Q. 13. At the time that you examined it in Chicago in the Federal Building, what did you do, if anything, in the matter of measurements?

"A. I again verified the measurements taken in Providence, R. I.

"Q. 14. What did you do to assure yourself, if anything, that the scale which you measured in Chicago was the scale which you had measured in Providence, R. I.?

"A. By measurements and general conditions, it seemed to be the same scale, and also it bore the same scaler's mark as was on the scale at Providence.

"Q. 15. Where was this scaler's mark?

"A. The scaler's mark was on the wood case of the scale.

"Q. 16. After this examination in March, 1917, did you know whether the scale that you examined was the same as the scale which you had examined in Providence?

"A. It was.

"Q. 17. After your examination of the scale in Providence, R. I. known as 'Providence Exhibit 3,' what did you do, if anything, to build a drum upon the plan of the drum in 'Providence Exhibit 3'?

"A. The scale in Providence, I made measurements and made an exact drawing of the Phinney model of the wooden drum and of its

construction. Returning to Toledo I built a scale in proper proportion to fit out present cylinder scales, following the same specification and drawings as were contained in the Phinney model.

"Mr. Zane: We object to that statement: 'following the same specification,' as stating a construction.

"The Witness: As to construction.

"Q. 18. In building the drum for the insertion of one of your scale, what proportion did you follow as compared with the Phinney scale?

1422 "A. The exact proportion of increase was 1.84. We followed generally those proportions.

"Q. 19. Your scale was 1.84 times as large as the Phinney; is that it?

"A. Yes, sir.

"Q. 20. When I say scale, I mean now your scale of work, your size of your drum was 1.84 times as large as the Phinney?

"A. Yes, sir.

"Q. 21. Of what material did you build your spiders in such drum?

"A. They were made of wood, of black walnut.

"Q. 22. Do you know the material of which the periphery or outer covering of such drum was made of this new scale?

"A. The periphery or paper drum of the scale, the drum we made of a two-ply paper, two thicknesses of paper.

"Q. 23. Of what thickness did you make the wooden spiders?

"A. They were one quarter inch in thickness.

"Q. 24. Do you know the diameter of the spiders?

"A. The spider in our scale was 8⅝ inches.

"Q. 25. Will you state whether there is before you the scale which contains the drum which was made under your supervision, as testified to?

"A. This is the scale (indicating).

"Q. 26. This scale which I will ask the reporter to mark with suitable label, "Toledo Exhibit No. 1," contains, does it, the drum or cylinder which was made under your supervision?

"A. It does.

"Q. 27. Look at the end of "Toledo Exhibit No. 1," and state if you can observe the end of the drum or cylinder?

"A. I can.

"Q. 28. What is the material which you observe as being the end of the drum or cylinder?

"A. Wood, black walnnut.

"Q. 29. Look at the other end of the Exhibit, and state if you can see the other end of such drum or cylinder?

"A. I can.

"Q. 30. What is the material?

"A. Wood, black walnut.

"Q. 31. Look through the drum or cylinder from either end, and state if you can see any intermediate spider?

"A. I can.

"Q. 32. Where is that spider located?
1423 "A. In the middle of the chart lengthwise.
"Q. 33. The middle spider is in a plane parallel to the planes of the two end spiders, is it?
"A. Yes.
"Q. 34. And occupies a position in the middle of the chart?
"A. It does.
"Q. 35. Of what material is that middle spider made?
"A. Wood.
"Q. 36. In 'Toledo Exhibit No. 1' what is the substance or material around the cylinder or drum outside of the spiders which you have observed?
"A. Paper.
"Q. 37. In that Exhibit, is that paper of single or double thickness?
"A. Double, two-ply.
"Q. 38. Will you put a one pound weight up on 'Toledo Exhibit No. 1' upon the platform?

"(Witness complies.)

"Q. 38. Have you done so?
"A. I have.
"Q. 40. Upon a reading of the Exhibit in question underneath the red line across the reading glass, where is the graduation upon the paper chart, with the one pound weight upon the scale?
"A. It is at one pound.
"Q. 41. Will you put a two pound weight, in addition to the one pound weight, upon 'Toledo Exhibit No. 1.'

"(Witness complies.)

"Q. 42. Have you done so?
"A. I have.
"Q. 43. Making a reading in the manner last made, where is the reading line with reference to the graduation upon the chart?
"A. Three pounds.
"Q. 44. When you say 'three pounds,' you mean that it is over 'three pounds'?
"A. It is exactly three pounds.
"Q. 45. Exactly over the three pound line?
"A. It is exactly in the middle of the three pound graduation line; the red line coincides with it.
"Q. 46. Put now a one pound weight in addition to the three pounds, upon the platform of 'Toledo Exhibit No. 1,' and make a reading, and tell what the result is.
1424 "A. The four pound graduation line on the chart exactly coincides with the red reading line on the lens frame.
"Q. 47. Have you with you any half pound test weights?
"A. I have not.
"Q. 48. Will you put now two additional pound weights upon the platform of the scale?

"(Witness complies.)

"Q. 49. Tell how many pounds in weight are now upon the platform of the scale, without reference to the reading chart.

"A. There are six pounds in weight on the platform of the scale.

"Q. 50. Reading the chart upon the scale, where is the reading line with reference to the graduations upon the chart which indicate weight?

"A. The six pound graduation on the chart coincides with the red reading line on the lens frames, on the scale frame.

"Q. 51. So that in each of these instances concerning which you have interrogated, the weight upon the platform is correctly or incorrectly stated by the scale in question?

"A. Correctly stated by the scale.

"Q. 52. Have you ever seen the scale known as 'Complainant's Exhibit of Defendant's Scale,' being an old 345 scale, in this case?

"A. I have.

'Q. 53. What was the substance which covered the outer portion of the drum in that scale?

"Mr. Zane: We object. This testimony is upon a point not concerning the Phinney scale, and is not even reserved in the closing of the defendant's testimony. The only matter reserved was testimony with regard to the Phinney scale.

"A. It was paper.

"Q. 54. Of what thickness, if you know, was such paper?

"A. Single thickness, or just one half of that contained in this Exhibit. 'Toledo Exhibit No. 1.'

"Q. 55. Why in the manufacture of the drum in 'Toledo Exhibit No. 1' did you make the paper covering of two-ply thickness?

"A. Following the propositions of the Phinney scale, proportions in number of ply of paper, proportion in thickness that would be.

"Q. 56. Have you ever yourself weighed the drum as assembled in the 'Toledo Exhibit No. 1'?

"A. I did.

1425 "Q. 57. On what did you make such weighing?

"A. I made it on a Gurley even balanced scaler's scale.

"Q. 58. On the scale on which you made such weighing, what was the weight of the drum in 'Toledo Exhibit No. 1'?

"A. I made a note of that. Can I refer to that note?

"Q. 59. If you made notes of it at the time you made the weighing, if they are in your handwriting?

"A. They are.

"Q. 60. You may refresh your recollection from them.

"A. Our wood spider chart weighed 17-13/16 oz.

"Q. 61. When you say 'our wood spider chart,' what do you mean?

A. The one in the Exhibit scale, 'Toledo Exhibit No. 1,' weighed 17-13/16 oz.

"Q. 62. Did you at any time over weight the assembled drum in the 345 scale?

"A. I did.

"Q. 63. What was the weight of such drum?
"A. The weight of such drum with steel spiders is 11-3/16 oz.
"Q. 64. In the 'Complainant's Exhibit of Defendant's Scale'; the spider is a steel spider, isn't it?
"A. Yes, sir.
"Q. 65. On what instrument did you weigh the drum containing the steel spider in question?
"A. The same scale as the one that the wooden spiders was weighed on.
"Q. 66. A Gurley even balanced scale?
"A. A Gurley even balanced scaler's scale.
"Q. 67. How close, approximately, does that scale weigh, if you know?
"A. Fractional ounces, grains.
"Q. 68. In the assembly of the various parts comprising the drum in 'Toledo Exhibit No. 1,' after the spiders are made, were the other operations the same as in the drums such as those in 'Complainant's Exhibit of Defendant's Scales'?
"A. Practically the same.
"Q. 69. The shaft is of the same material, is it?
"A. The shaft is of the same material.
"Q. 70. The same kind of shaft exactly, isn't it?
"A. Steel shaft, both the same.
"Q. 71. The pinion?
"A. The pinion is the same.
1426 "Q. 72. The method of attaching the paper to the spider, is that the same?
"A. It only varies in an instance, that where a paper drum is fastened to a steel spider, in addition to glueing it to the spider, it is stapled, fastened with little wires.
"Q. 73. In a wooden spider it will adhere without that staple, will it?
"A. It will adhere without the staple.
"Q. 74. So that you have less work in that regard?
"A. Yes.
"Q. 75. Have you made any computation of the cost of metal spiders?
"A. I have.
"Q. 76. What, if anything, did you do in determining those costs?

"Mr. Zane: The same objection to this testimony, that it is attempted to be taken after the defendant's case is closed, as to all such testimony, not waiving any of the other objections made, of course.

"A. In arriving at the cost of the chart spiders, I took a quantity of material of the specification we make those chart spiders of, which is .017 inch in thickness, 9.25 inches in width, and 28 inches long. I selected 35 sheets of this stock, aluminum stock, from which we made 105 chart spiders.

"Q. 77. In 35 sheets of aluminum stock, how many square inches were in each sheet, if you know?

"A. 259 square inches in each sheet.

"Q. 78. At the time that you made these investigations, did you make any memorandum?

"A. I made date sheets of the entire transaction.

"Q. 79. At the time you made them?

"A. At the time I made the test.

"Q. 80. Well, you may refer to those to refresh your recollection, if you wish, instead of figuring it out independently now. In each sheet you say there were 259 square inches; is that correct?

"A. Yes, sir.

"Q. 81. Now, in 35 sheets, how many inches were there?

"A. There would be 9,065 square inches in 105 spiders, in 35 sheets.

"Q. 82. And how many spiders did 35 sheets produce?

"A. It produced 105 spiders.

"Q. 83. In these tests, what number of spiders were you seeking to obtain the cost of?

1427 "A. 100.

"Q. 84. What did you do next after you determined that in 105 spiders there were 9,065 square inches of material?

"A. I found the number of square inches there would be in 100 spiders.

"Q. 85. That is of the original material from which it was made; is that right?

"A. Yes, sir.

"Q. 86. Now what amount of material was 100/105 of 9,065 square inches?

"A. There was 8,633.3 square inches in 100 spiders.

"Q. 87. What was the thickness of the material?

"A. .017 inches.

"Q. 88. Then did you multiply your 8,633.3 square inches by the thickness of the material to obtain the cubical contents?

"Mr. Zane: We object to that as leading.

"A. I did.

"Q. 89. What was the amount of cubical contents in the original material required to make 100 spiders?

"A. 146.766 cubic inches.

"Q. 90. Do you know what the weight of a cubic inch of aluminum is?

"A. Yes.

"Q. 91. What is it?

"A. The co-efficient is .0963, as given in the Kent book.

"Q. 92. When you say the co-efficient is .0963, that is per cubic inch?

"A. Per cubic inch.

"Q. 93. That is in ounces or in what?

"A. That is per cubic inch, .0963, it is that part of a pound.

"Q. 94. What did you next do then to obtain the weight, if you did anything, of 146.766 cubic inches of aluminum?

"A. I multiplied it by the co-efficient.

"Q. 95. Just state what you did.

"A. I multiplied 146.766 by the co-efficient for aluminum, weight per cubic inch, .0963, giving me the theoretical weight of 14.13. I did that to see how close we were to the actual weight.

"Q. 96. That is, the weight of aluminum on the basis that you have started in, 100 spiders, the original material; is that right?

"A. That is the theoretical weight.

1428 "Q. 97. Now, 35 sheets of aluminum weighed how much?

"A. 35 sheets of aluminum weighed 15 pounds.

"Q. 98. The amount of aluminum which was used in the 100 spiders weighed actually how much?

"A. 14.28 pounds.

"Q. 99. The difference between your theoretical weight and your actual weight was then what?

"A. .15 pounds.

"Q. 100. For 100 spiders?

"A. Yes, sir.

"Q. 101. Did you make these weighings yourself?

"A. I did.

"Q. 102. On what instrument did you make those weighings?

"A. I made the weighings on a fan type Toledo scale, after seeing that the scale was tested very carefully and proving it accurately.

"Q. 103. Take, for instance, the year 1911. Do you know what the average price of aluminum was?

"Mr. Zane: The same objection as to all of this testimony, without repeating the objection.

"A. The price as given me by our purchasing department was——

"Mr. Zane: We object to that now as hearsay.

"The Witness (continuing): —was 38.6 cents per pound.

"Q. 104. And that price you assumed to be correct, did you?

"A. I did.

"Q. 105. What did you next do, then, if anything, to determine the cost of the material from which the 100 spiders were made?

"A. I had the stock previously selected, put through all the operations necessary to produce the spiders in order to arrive at the amount of scrap that would be produced.

"Q. 106. And do you know how much scrap was left in weight from the material in question?

"A. There was 11 pounds 6½ ounces of scrap in the production of 105 spiders.

"Q. 107. Do you know what that scrap was worth per pound?

"A. 14½ cents per pound.

"Mr. Zane: We object to that. He doesn't say he knows, or how he knows.

1429 "Q. 108. That figure was given to you by whom?
"A. By the purchasing department.
"Q. 109. Now, assuming as you did, that that figure was correct, what, if anything, did you next do to determine the cost of the 100 spiders?
"A. We found the weight of the scrap in the 100 spiders.
"Q. 110. You have already testified to that.
"A. No, I didn't; I testified to the weight in 105 spiders.
"Q. 111. You took 100/105 of 11 pounds and 6½ ounces, did you?
"A. Yes, sir.
"Q. 112. And found that the amount of scrap was how much?
"A. It was 10.85 pounds, for 100 spiders.
"Q. 113. What next did you do, if anything, to determine the cost of the metal in these spiders?
"A. I had the spiders put through the operation.
"Q. 114. No, in computation.
"A. After arriving at the price of the material, multiplying it by the price per pound, having the amount of scrap at the price per pound, knowing the rates for the different operations, gave me the net cost per 100 spiders produced, the flat net cost.
"Q. 115. Confining yourself now to the cost of the materials you have obtained according to your testimony, the amount of original material that was used in making 100 spiders, you have that, have you?
"A. Yes, sir.
"Q. 116. What was the cost of that material at the rate of 38.6 cents per pound?
"A. $5.51.
"Q. 117. You have obtained the amount of scrap left from the material used for the manufacture of 100 spiders, which you say was 10.85 pounds; is that correct?
"A. Yes.
"Q. 118. And multiplying that by the value of such scrap as given to you by the purchasing department, what was it?
"A. $1.57.
"Q. 119. Making a total cost of the material, net cost, in the 100 spiders, how much?
"A. $3.94.
"Q. 120. That was in the year 1911?
"A. 1911.
1430 "Q. 121. Did you do anything to determine the cost of the material in those spiders which were made of sheet steel?
"A. I did.
"Q. 122. And what, if anything, did you so do?
"A. I got the costs of the material through the purchasing department.
"Q. 123. What figure did you assume as being true that you received from the purchasing department?
"A. You mean price?
"Q. 124. Yes, for the year 1911, say?

"A. I got no steel. I didn't figure steel on that year, because we weren't making steel spiders that year.

"Q. 125. You weren't making steel spiders in 1911?

"A. No, sir.

"Q. 126. When did you abandon the making of steel spiders?

"A. 1910.

"Q. 127. In 1910, the last time that you made steel spiders, was the sheet which you used for the purposes of your estimate the same superficial area as the other sheet?

"A. It was.

"Q. 128. What was the number of square inches in that sheet, of one sheet?

"A. 259 square inches.

"Q. 129. The same as the other?

"A. Yes.

"Q. 130. Now what was the thickness of that sheet steel?

"A. The same, .017 inches.

"Q. 131. What were the cubical contents for the material for the test number of spiders?

"A. It was the same as in the aluminum, 146.766 cubic inches.

"Q. 132. What is the co-efficient which you used?

"A. The co-efficient for the weight of a cubic inch of steel is .2834 as given in the Kent hand book.

"Q. 133. That proportion per pound?

"A. Yes, sir.

"Q. 134. In 146.766 cubic inches, what is the weight, using the co-efficient, which you have last mentioned?

"A. 41.593 pounds.

"Q. 135. That was the material for 100 spiders, was it?

"A. That was the material for 105 spiders.

1431 "Q. 136. Now, to obtain 100 spiders, you took 100/105 of that amount, is that correct?

"A. Yes, sir.

"Q. 137. What price per pound for steel in the year 1910 did you use in these estimates?

"A. 4 cents per pound, $4.00 a hundred.

"Q. 138. Which was given to you by the purchasing department?

"A. Yes, by the purchasing department.

"Q. 139. And you assumed that to be true?

"A. I do.

"Q. 140. What was the cost of the steel for the spiders in question, before allowing any salvage, if there was any, for scrap?

"A. May I make a correction?

"Q. 141. Yes.

"A. The weight which I gave for the spiders was for 100 spiders, and not for 105.

"Q. 142. Now, multiplying your weight of 41.593 by 4 cents a pound, your price per pound, which you assumed as correct, what was the cost of the material for 100 spiders?

"A. $1.66.

"Q. 143. What did you do to determine, if anything, the value of the waste or scrap on the steel spiders?

"A. I took it in the same proportion as we did for aluminum, as the operations are identical.

"Q. 144. You took 10.85 over 14.28 pounds—that was the fraction which you used to determine the amount of scrap, wasn't it?

"A. Yes, sir.

"Q. 145. Now, using that fraction, what is the amount of scrap left from this 41.593 pounds of steel in weight?

"A. 31.6 pounds.

"Q. 146. Did you obtain any figure from any source as to the value of such scrap in the year 1910?

"A. I did.

"Q. 147. From what source?

"A. From the purchasing department.

"Q. 148. And what figure did you assume to be true for your computation?

"A. The price per pound of scrap is .0218.

"Q. 149. For what?

"A. Price per pound of scrap.

1432 "Q. 150. That is 21.8 cents for 100 pounds?

"A. Yes, sir, for 100 pounds.

"Q. 151. Now at that rate for scrap, what was the value in 1910 of the 31.6 pounds of scrap left from the manufacture of those 100 steel spiders?

"A. Seven cents.

"Q. 152. Deducting that 7 cents from the $1.66, the cost of the original material, what was the net cost of the material for the 100 spiders?

"A. $1.59.

"Q. 153. Mr. Reeves, you say you stopped the manufacture of steel spiders in 1910 or early in 1911?

"A. Yes.

"Mr. Zane: He said 1910.

"Q. 154. Well, in 1910?

"A. 1910.

"Q. 155. When in 1910?

"A. I don't know.

"Q. 156. Why did you stop the manufacture of steel spiders?

"A. The principal reason was to stop the complaints which we had had in the field on the rusting of the steel spiders, defacing the charts.

"Q. 157. Did the aluminum spiders rust?

"A. No.

"Q. 158. In the manufacture of the metal spiders, what operations are necessary and what were used by you?

"A. The operations are slightly different on the end spider and in the middle spiders. The first operation is a blanking operation.

"Q. 159. What is the blanking operation? Just tell the court what that is?

"A. This sheet stock which I mentioned before is large enough to produce three spiders.

"Q. 160. Each sheet?

"A. Each sheet. The first operation consists of putting this sheet under a suitable die and blanking out the round wheel part of the spider.

"Q. 161. What is the next operation?

"A. The next operation is forming.

"Q. 162. What, briefly, do you mean by forming?

"A. We draw a rim on this wheel produced by the blanking operation, whose purpose is to add stiffness to the spider, and also give us something to fasten our chart to.

1433 "Q. 163. It is a bending over, isn't it, of the edges of the material?

"A. Yes. In addition to that, we form some guides for counterweights which are used for balancing our chart.

"Q. 164. What is the next operation after the forming?

"A. The next operation is piercing out the stock to form the arms. This is a triangular shaped piece in between the arms, which we blank out.

"Q. 165. What is the next operation?

"A. The next operation is putting slots in the arms for means of guiding the chart counter-balance weight.

"Q. 166. What is the next operation?

"A. The next operation is piercing small holes in the end chart spiders, to enable us to rivert a hub onto the chart spiders, so that we can get a better fastening on to the chart shaft.

"Q. 167. What is the next operation?

"A. The next operation is to punch the staple holes in the rim of the spider, so that after the chart is glued onto the spider, we can put staples through the paper drum, through the holes in the spider, and clinch them on the under side, assisting in holding the chart to the spider.

"Q. 168. You have named six. Are there any other operations?

"A. Not in the end spiders.

"Q. 169. Now, in the middle spider, are there any other operations?

"A. In the middle spider we use the operations of blanking, forming, blanking out between the arms, piercing the slots in the arms for the counter-balance weight, and enlarging the hole for the chart shaft to pass through.

"Q. 170. How many operations, then, are there on the end spiders and how many on the middle spiders?

"A. There are six on the end spiders, and five on the middle spider.

"Q. 171. In the middle spider, is there any stapling operation?

"A. There is none.

"Q. 172. That is peculiar to the end spiders, isn't it?

"A. Just to the end spider, the middle spider is used simply to hold the paper in position.

"Q. 173. Do you know what method was adopted or followed by

your company in paying for this work, whether it was time work or piece work?

"A. It is all done piece work.

1434 "Q. 174. Now, adverting to the first operations that you have testified to, the blanking operation, in 1906 what did you pay for those blanking operations?

"A. 17 cents a hundred pieces, 100 spiders.

"Q. 175. Now, how did that price compare with what was paid in 1907, 1908, 1909, 1910, 1911, down to August, 1912?

"A. The price was not changed.

"Q. 176. Take the second operation, that of the forming of the metal spiders after they were blanked. What did you pay for that, if you know?

"A. We paid 13 cents for 100 spiders.

"Q. 177. Was that price the price in 1906?

"A. It was.

"Q. 178. And did that persist until 1912?

"A. It did.

"Q. 179. Next the operation of the piercing of the center chart shaft hole; what did you pay for that?

"A. That was not the next operation, but the next operation was 4 cents a hundred—no, are you talking of the end spider or the middle spider?

"Q. 180. I am talking now of the end spiders.

"A. The hole in the end spider is punched at the same time that we blank out the center; it is on the third operation; it is a part of that.

"Q. 181. What did you pay for the third operation in 1906?

"A. Six cents per 100 spiders.

"Q. 182. How did that compare with what you paid in 1907, 1908, 1909, 1910, 1911 and 1912?

"A. The price never changed.

"Q. 183. The fourth operation, for making the slots for the counter-balance weight, if I am correct?

"A. Yes.

"Q. 184. What did you pay for that operation?

"A. Ten cents per 100 spiders.

"Q. 185. When, in 1906?

"A. That price was established and has never been changed—1906.

"Q. 186. The piercing of the hub for the rivet holes, the fifth operation; what did you pay for that?

"A. We paid 4 cents a 100 spiders.

"Q. 187. In 1906?

"A. Yes, sir, and it continued; the rate was never changed.

1435 "Q. 188. The opening of the shaft holes in the middle spider, that operation peculiar to the middle spider, *was* did you pay for that?

"A. We paid 4 cents per 100 spiders.

"Q. 189. In 1906?

"A. In 1906, and the price has never changed.

"Q. 190. The making of the staple holes in the end spiders for the purpose of attaching the paper; what did you pay for that?
"A. We paid 20 cents a hundred spiders.
"Q. 191. In 1906?
"A. In 1906, and that price has never been changed.
"Q. 192. Now, from the figures which you have given, what was the cost per 100 of the end spiders for labor?

"Mr. Zane: The same objection as to this.

"A. The labor cost was 70 cents for the end spiders, per 100 spiders.
"Q. 193. What was the cost for the middle spiders?
"A. 50 cents for 100 spiders. These operations are all by the hundred.

"Mr. Meads: Defendant offers in evidence exhibit identified by the witness and marked "Tole[illegible] Exhibit No. 1."
"Mr. Zane: We object to the exhibit because it is constructed years after the accounting period. It appears from the Exhibit itself that it is not a reproduction in any way of the alleged Phinney scale, and consists merely of substituting in a Toledo cylinder scale, which has been adjudged to infringe, another cylinder which in itself infringes or would infringe if within the accounting period. And we add to that all of the objections made at the beginning of the deposition.

Cross-examination.

By Mr. Zane:

"Mr. Zane: Without waiving any of the objections to the deposition of this witness, the complainant's counsel cross examines upon certain portions of the testimony.

"X Q. 194. Mr. Reeves, you say that on December 18, 1916, at Providence, R. I. you examined a scale. Was that scale then marked 'Providence Exhibit 3?'
"A. No.
"X Q. 195. Now this scale that you examined there was examined at the house of Mr. Phinney?
"A. It was.
"X Q. 196. What time of the day was it?
1436 "A. In the evening.
"X Q. 197. Who were present?
"A. Myself, Mr. Frye, Mr. Phinney, the owner of the scale, or supposedly the owner, and his wife part of the time, and his son a portion of the time.
"X Q. 198. What was the outer casing of this scale?
"A. Wood.
"X Q. 199. Did you take the scale apart?
"A. I did.

"X Q. 200. And what instruments did you use for measurements, did you say?

"A. I had a micrometer, caliper and a measuring scale, a small steel scale.

"X Q. 201. Your measuring scale was divided how?

"A. Dividend in hundredths.

"X Q. 202. Hundredths of what?

"A. Hundredths of an inch. And also divided into thirty-seconds and sixty-fourths.

"X Q. 203. Did you measure anything more than the cylinder?

"A. I did not, the cylinder and the shaft, the mechanism in connection with the chart shaft, the spider and the drum, the paper drum.

"X Q. 204. You measured the cylinder, shaft, chart, spider and covering of the drum?

(No reply.)

"X Q. 205. Did the scale have a spring in it?

"A. It was a spring scale.

"X Q. 206. Well, did you see the spring?

"A. Yes.

"X Q. 207. Did you measure the spring?

"A. I did not.

"X Q. 208. Did you ascertain the capacity of the chart?

"A. I didn't pay attention to the capacity of that chart.

"X Q. 209. Did you look at the figures on the chart to measure their size?

"A. I did not.

"X Q. 210. Well now, what was the first measurement you took?

"A. The first measurement I took was of the chart spider itself.

"X Q. 211. And what was that, the measurement of the diameter?

"A. It was the complete chart spider. It seemed as though
1437 they had a metal templet, from which these wooden spiders were produced. They marked them out and sawed them out according to that metal templet.

"X Q. 212. Did you measure the spider itself or the templet?

"A. I fit the templet on to the spider, to see that it was exactly the same, and then laid the templet on the paper, and marked the spider off on the paper. I then measured the spider, and measured the templet, and marked the measurements on my drawing.

"X Q. 213. You fitted the templet to the spider, and then you marked out on a piece of paper the templet itself?

"A. Yes, marked around the templet.

"X Q. 214. Well now, give us the dimensions you got?

"A. I couldn't give them to you off hand I made a sketch of it, a drawing of the complete chart.

"X Q. 215. Haven't you got with you what those dimensions were?

"A. I haven't no.

"Mr. Meads: You can have it here at two o'clock, or at whatever time we adjourn to?

"The Witness: Yes, sir, I can.

"Mr. Meads: You will produce it, will you?

"The Witness: I will produce it.

"By Mr. Zane:

"X Q. 216. The dimensions are marked on the sketch?

"A. The dimensions are all marked on the sketch.

"X Q. 217. And when the sketch is produced, it will show what the dimensions are?

"A. Yes.

"X Q. 218. Then the next measurements you took were what?

"A. I measured the charts for their length.

"X Q. 219. And you cannot tell what that measurement was?

"A. No.

"X Q. 220. But that will be on your sketch?

"A. It will be on the sketch.

"X Q. 221. What other measurements did you take?

"A. I measured the chart shaft.

"X Q. 222. The diameter of it?

"A. The diameter of it.

"X Q. 223. But you can't tell that?

"A. I could not.

"X Q. 224. But that also will appear on the sketch?

1438 "A. It will.

"X Q. 225. You have the original sketch made at Providence?

"A. I have the original sketch that I made in Providence.

"X Q. 226. You measured, of course, the length of the shaft?

"A. I measured the length of the shaft.

"X Q. 227. And you cannot tell us that?

"A. I cannot.

"X Q. 228. What other measurements did you take?

"A. I took all the measurements necessary to reproduce the chart; I can't recall them all.

"Mr. Zane: We move to strike out his testimony as not responsive, and as stating a conclusion.

"X Q. 229. Well, can you recall any other measurements that you took?

"A. I took measurements of a wooden separator that separated the chart spiders and kept them in position.

"X Q. 230. Well, this wooden separator was a separator that divided the chart into two parts?

"A. It fitted over the chart shaft, and these chart spiders were mounted on that, forming two wheels like an axle; this chart was a separator chart, yes, sir.

"X Q. 231. Now that cylinder you saw before you there in that scale was not a single cylinder, but it was two cylinders, wasn't it?

"A. Two cylinders.

"X Q. 232. There were two separate charts there?

"A. Two separate charts.

"X Q. 233. Now, this cylinder that you constructed in imitation of that was not divided into two cylinders, two separate charts, but it is one whole cylinder and one whole chart, isn't it?

"A. It is.

"X Q. 234. How many spiders were there on the Phinney scale?

"A. Four.

"X Q. 235. One at each end of the two charts?

'A. Yes.

"X Q. 236. Was there any intermediate support between the two spiders on the single chart?

"A. No.

"X Q. 237. What was the diameter of this wooden separator?

1439 "A. I do not recall the exact dimensions, about ¾ of an inch in diameter; it is marked on the drawing which I will produce.

"X Q. 238. That was a circular——

"A. It was circular.

"X Q. 239. I mean by diameter, the distance across it?

'A. It was about ¼ of an inch.

"X Q. 240. You are speaking about thickness of it, aren't you?

"A. No, I am not; it was circular, ¾ inch, and had a ¼ inch hole through there (indicating) for the shaft to go through. It was a separator made like this (indicating): it was cut out like a spool. Here was one chart spider, and here was the other chart spider, and this shaft passed through there, and this was about ¾ inch, and the chart shaft was, as I remember it, a quarter of an inch, and these chart spiders were ⅛ inch in thickness, and as I recall them, they were about 4-11/16 in diameter, that formed a component part of one chart over which was stretched the paper.

"X Q. 241. The wooden separator then, was a spool, at its larger part ¾ inch in diameter?

"A. Yes.

"X Q. 242. And what was the length of that spool.

"A. I do not recall.

"X Q. 243. Do you recall any other dimensions you took?

"A. No.

"X Q. 244. Afterwards you examined a scale in Chicago?

"A. I did.

"X Q. 245. And you satisfied yourself, from the sealing number on the scale, that it was the same scale you had seen down at Providence?

"A. I was satisfied from the sealer's stamp, and the general remeasurement proved I had previously measured, it was the same scale.

"X Q. 246. You made a second sketch, then?

"A. No, I verified my first sketch.

"X Q. 247. You just remeasured, and you found the measurements the same?

"A. I did.

"X Q. 248. Did you keep a memorandum of those second measurements?

"A. I did not.

1440 "X Q. 249. Now, this drum that you constructed was constructed when?

"A. This drum was constructed—I haven't got the exact date, but soon after the first of the year, 1917.

"X Q. 250. Was it before you took those measurements in Chicago?

"A. Yes.

"X Q. 251. And when did you finish that drum?

"A. This drum in this scale, 'Toledo Exhibit No. 1'?

"X Q. 252. Yes.

"A. I couldn't say.

"X Q. 253. Well, about when?

"A. Well, I don't know. We had difficulty in getting wood. I imagine the construction of the drum consumed two or three weeks.

"X Q. 254. Well, when did you first put it into a scale, so that you could operate the drum, how long ago?

"A. It was probably put in the scale soon after it was finished.

"X Q. 255. Well, how long has this scale——

"A. I imagine the development on that was made along in February, testing it on the scale.

"X Q. 256. You put it in the scale along in February?

"A. Yes.

"X Q. 257. So that the scale would be ready?

"A. Yes.

"X Q. 258. And the scale you are speaking of is the 'Toledo Exhibit No. 1'?

"A. Yes.

"X Q. 259. Now that drum which you have in this 'Toledo Exhibit No. 1', is it a drum divided into two parts?

"A. No, it is a single drum.

"X Q. 260. Has it a spool on it?

"A. It has a spool.

"X Q. 261. Has it two spiders in the middle?

"A. One.

"X Q. 262. Have you got a spider at either end of the spool?

"A. A spider at either end of the drum, and one in the middle.

"X Q. 263. But you haven't a spider at either end of the spool?

"A. No.

1441 "X Q. 264. What is the size of the spool there in this 'Toledo Exhibit No. 1'?

"A. I haven't got the dimensions of that here, but I imagine about the same size as in the Phinney scale.

"X Q. 265. Well, you increased the dimensions of the drum?

"A. Generally, we more than increased them, in proportion of 1.84.

"X Q. 266. Well, didn't you increase the dimensions of the spool?

"A. I don't know as to the dimensions of the spool in our chart. I don't think, however, we increased. We didn't, however, increase the dimensions of our shaft.

"X Q. 267. That is the shaft in 'Toledo Exhibit No. 1' is the same size as the shaft in this Phinney scale?

"A. About the same size.

"X Q. 268. What was the material of the shaft in the Phinney scale?

"A. Steel.

"X Q. 269. What is the material of the shaft in 'Toledo Exhibit No. 1'?

"A. Steel.

"X Q. 270. What was the diameter of the shaft in the Phinney scale?

"A. About ¼ inch.

"X Q. 271. Well, did you weigh the drum in the Phinney Scale?

"A. I did not.

"X Q. 272. Did you notice what the ends of the shaft of the Phinney drum were mounted on, or not?

"A. They were mounted on pointed bearings.

"X Q. 273. What do you mean by pointed bearings?

"A. There was as V recess in the end of the chart shaft, in which fitted a pointed screw on which the chart shaft revolved.

"X Q. 274. That is, the wood revolved against the screw?

"A. No, I said the chart shaft; the chart shaft, which is steel. The end of the chart shaft was recessed, inserted, in that was a pointed screw on which the chart revolved.

"X Q. 275. What was the size of that screw at either end?

"A. About a ¼ inch screw or 3/16.

1442 "X Q. 276. The screw had to be small enough to be inserted in the shaft?

"A. No, the screw was pointed on the end.

"X Q. 277. Was it a tapering screw?

"A. A taper, yes.

"X Q. 278. A tapering screw?

"A. The screw was made at an angle of probably 45 degrees, and it fit into the chart shaft in that manner (indicating).

"X Q. 279. What was the material of the screw?

"A. Steel.

"X Q. 280. So you had there steel revolving against steel?

"A. Yes.

"X Q. 281. Now the drum you have constructed for 'Toledo Exhibit No. 1' is a drum, you say, that is 1.85 larger in diameter?

"A. 1.84, yes sir.

"X Q. 282. Is it the same excess in length?

"A. I couldn't say, I don't know; I haven't measured that; I don't think so.

"X Q. 283. Well, how does the length of your drum in the 'Toledo Exhibit No. 1' compare with the length of the two drums constituting the whole Phinney drum?

"A. I haven't got that proportion.

"X Q. 284. Well, doesn't your sketch show the length of the Phinney drum?

"A. The sketch shows the length of the Phinney drum, yes.

"X Q. 285. Well, you know the length of this drum in Toledo Exhibit No. 1' don't you?

"A. No.

"X Q. 286. You surely know the length of the drums that you put in the cylinder scales, don't you?

"A. No.

"X Q. 287. Well, why didn't you lengthen your drum in 'Toledo Exhibit No. 1' so it would be proportionately as much larger than the Phinney drum as the diameter of the drum in 'Toledo Exhibit No. 1' is larger than the diameter of the Phinney drums; why didn't you do that?

"A. We simply made a drum of the same general construction as in the Phinney scale, and put it in our regularly constructed cylinder scale, without making any changes.

"X Q. 288. You had to make a drum that would fit your regular scale.

1443 "A. I made a drum that would fit our regular scale.

"X Q. 289. Now, you have put this imitation of the Phinney drum in one of your scales, which is what type number?

"A. That is style No. 381A. 'A' signifies the chart.

"X Q. 290. Well, that has got nothing to do with what we have before us, the 'A' part?

"A. No.

"X Q. 291. It is just style No. 381. Now, what is your number of the scale there?

"A. 178994.

"X Q. 292. So that you took a scale that you already had made, of your style No. 381, and put a drum on it, which you say is in imitation of the Phinney drum?

"A. We put it in our regular scale. That is our regular construction.

"X Q. 293. Now, this drum that you have here in this scale is mounted at the ends on discs, isn't it?

"A. Roller bearings.

"X Q. 294. Well, it is not exactly what you would call a roller bearing, is it? There are two roller discs, and the axis revolves against those roller discs?

"A. Yes.

"X Q. 295. Your regular construction. And you have put this with your full equipment of your dash-pot, stabilizing means, scale lever, pendulum, connection by means of a stirrup, a bar, rack bar and pinion?

"A. Yes.

"X Q. 296. And you have in this scale the shock absorber, the spring at the end of the rack bar, haven't you?

"A. Yes.

"X Q. 297. And you have the dash-pot?

"A. Yes.

"X Q. 298. Now, when you say that this drum in diameter is 1.84 times larger, you mean that if that Phinney drum was 1 inch in diameter, this would be the 1.84 inches?

"A. It would be 1.84 times larger; it would be 1.84 inches.

"X Q. 299. Well, assuming the Phinney drum, then, to be 1 inch in diameter, this drum is 1.84 inches?

"A. Yes.

"X Q. 300. I ask you because your phrase is ambiguous, You cannot tell from that. Just figure it out there and see what is the diameter of the Phinney drum that you have there.

1444 "A. Dividing the diameter of the Phinney drum, which is 4.6875 into our drum, which is 8.625, gives 1.84 times, so that if we would multiply the Phinney drum, 4-11/16 by 1.84, would give you the diameter, 8⅝ inches.

"X Q. 301. Now, what was the circumference of the Phinney drum?

"A. It is a little over 14 inches.

"X Q. 302. About 14½ inches.

"A. Yes.

"X Q. 303. Now, your circumference would be 24.6, about?

"A. 24.89.

"X Q. 304. As a matter of fact, the circumference of your drum that you fit into your 371 scale is 26 inches, isn't it?

"A. I will figure it out.

"X Q. 305. No, your ordinary drum—I am not speaking of this drum?

"A. This is the diameter of our regular drum.

"X Q. 306. Don't you know the diameter of your regular drum?

"A. Yes, I gave that, 8⅝ inches.

"X Q. 307. That is your regular drum?

"A. Yes.

"X Q. 308. Now, what memorandum are you referring to there?

"A. This is a memorandum that gives the weight of the wood spider against a steel spider, and the diameter of the Phinney chart and our chart, showing it is 1.84 times larger.

"X Q. 309. Those are figures you took off of your chart?

"A. Yes, off the measurement.

"X Q. 310. Off of your drawing of the Phinney scale?

"A. Yes.

"X Q. 311. And you took them off of your drawing correctly, did you?

"A. Yes.

"X Q. 312. Let me see that memorandum a moment?

(Witness complies.)

"X Q. 313. Well, you saw three Phinney scales, did you?

"A. I did, in the Federal Building in Chicago.

"X Q. 314. One was a brass casing?

"A. Yes.

"X Q. 315. And another was an iron casing?

"A. Yes.

"X Q. 316. And the other was a square wooden casing?
1445 "A. A wood casing.
"X Q. 317. Now, the wooden material in the Phinney drum was black walnut, in the 'Providence Exhibit 3.'
"A. It was difficult to tell; it was either a cedar or a walnut.
"X Q. 318. You couldn't tell which?
"A. I couldn't tell on account of its age. He stated they had always been made of cedar or walnut.
"X Q. 319. You didn't satisfy yourself as to which wood it was?
"A. Why, I knew it was a similar wood, owing to its general color.
"X Q. 320. It must have been in your judgment either cedar or walnut?
"A. Yes.
"X Q. 321. Well, now, did you take any test weight, and test those Phinney scales as to their weighing?
"A. I did not.
"X Q. 322. Why didn't you do that?
"A. I didn't think they would weigh properly.
"X Q. 323. That thing wouldn't weigh at all, would it?
"A. I don't know. It would indicate some weight, but it wouldn't indicate a correct weight. The scale, of course, wouldn't weigh, with the kind of bearings the scale was constructed with.
"X Q. 324. Well, why didn't you weigh that Phinney double chart or double cylinder?
"A. I had no means of weighing it there, and at that time I didn't care for the weight.
"X Q. 325. Now, you say you changed your construction of your scale from steel to aluminum some time in the year 1910?
"A. The last of the year 1910. The first of the year 1911 we began using aluminum.

"Mr. Zane: As to the testimony of the witness in regard to the material and the figures of cost, the complainant declines to cross-examine, upon the ground that evidence upon those matters cannot be offered in the form of deposition at the present time under the closing of the case for the defendant, and no reason is shown why this evidence was not attempted to be offered before the Master when this witness was present testifying before the Master.
"Mr. Meads: It is now 12:30, and counsel for the defendant offer
to have at the resumption of the session for the taking of
1446 this testimony at 1:30 the sketch testified to by the witness,
if counsel for the complainant declares that he desires the same for the purpose of offering it in evidence.
"Mr. Zane: I do not know that I desire to offer it in evidence. I desire to examine it, to look at it, because without that sketch produced this witness' testimony is worthless. He has testified to a conclusion, and that is that the measurements of this drum exhibited are relatively a certain figure to those of the Phinney drum, but he hasn't produced or stated the measurements on the Phinney drum.

"(Hearing adjourned until 1:30 P. M. same day.)